Math Practice - Grade 6

M1 Multi digit division and decimal fluency

M1 6.NS.B.2, 6.NS.B.3

Name: _____ Date: _____

Divide with a two digit divisor. Add, subtract, multiply, and divide decimals. Line up the decimal points.

1 **Divide. Write the quotient and the remainder.**

$$81 \overline{)24443} \quad \square\square\square \text{ R } \square$$

2 **Add.**

$$\begin{array}{r} 0.406 \\ + \quad 1.772 \\ \hline \square \end{array}$$

3 **Multiply.**

$3.8 \times 3.2 = \square$

Math Practice - Grade 6

M1 Multi digit division and decimal fluency

M1 6.NS.B.2, 6.NS.B.3

Name: _____ Date: _____

Divide with a two digit divisor. Add, subtract, multiply, and divide decimals. Line up the decimal points.

1 **Divide. Write the quotient and the remainder.**

$$46 \overline{)45167} \quad \square\square\square \text{ R } \square$$

2 **Add.**

$$\begin{array}{r} 4.516 \\ + \quad 7.188 \\ \hline \square \end{array}$$

3 **Multiply.**

$$5.3 \times 9.3 = \square$$

Math Practice - Grade 6

M1 Multi digit division and decimal fluency

M1 6.NS.B.2, 6.NS.B.3

Name: _____ Date: _____

Divide with a two digit divisor. Add, subtract, multiply, and divide decimals. Line up the decimal points.

1 **Divide. Write the quotient and the remainder.**

$$93 \overline{)51753} \quad \square\square\square \text{ R } \square$$

2 **Subtract.**

$$\begin{array}{r} 7.228 \\ - \quad 1.828 \\ \hline \square \end{array}$$

3 **Multiply.**

$$4.9 \times 8.5 = \square$$

Math Practice - Grade 6

M2 Dividing fractions by fractions, GCF, LCM

M2 6.NS.A.1, 6.NS.B.4

Name: _____ Date: _____

Divide a fraction by a fraction. Find the greatest common factor and the least common multiple. Rewrite a sum as a product.

1 **Divide. Write the answer in the box.**

$$\frac{1}{4} \;/\; \frac{5}{11} = \frac{\square}{\square}$$

---

2 **Find the greatest common factor of 69 and 4.**

$$\text{GCF}(69, 4) = \square$$

---

3 **Find the least common multiple of 8 and 9.**

$$\text{LCM}(8, 9) = \square$$

---

4 **Rewrite 36 + 24 as a product.**

$$36 + 24 = \square$$

Math Practice - Grade 6

M2 Dividing fractions by fractions, GCF, LCM

M2 6.NS.A.1, 6.NS.B.4

Name: _____ Date: _____

Divide a fraction by a fraction. Find the greatest common factor and the least common multiple. Rewrite a sum as a product.

1 **Divide. Write the answer in the box.**

$$\frac{1}{4} \quad / \quad \frac{2}{8} \quad = \quad \square$$

---

2 **Find the greatest common factor of 82 and 27.**

$$\text{GCF}(82, 27) = \square$$

---

3 **Find the least common multiple of 3 and 12.**

$$\text{LCM}(3, 12) = \square$$

---

4 **Rewrite 20 + 20 as a product.**

$$20 + 20 = \square$$

Math Practice - Grade 6

M2 Dividing fractions by fractions, GCF, LCM

M2 6.NS.A.1, 6.NS.B.4

Name: _____ Date: _____

Divide a fraction by a fraction. Find the greatest common factor and the least common multiple. Rewrite a sum as a product.

1 **Divide. Write the answer in the box.**

$$\frac{2}{7} \;/\; \frac{2}{12} = \square\frac{\square}{\square}$$

---

2 **Find the greatest common factor of 54 and 71.**

$$GCF(54, 71) = \square$$

---

3 **Find the least common multiple of 5 and 9.**

$$LCM(5, 9) = \square$$

---

4 **Rewrite 72 + 48 as a product.**

$$72 + 48 = \square$$

Math Practice - Grade 6

M3 Ratios and unit rates

M3 6.RP.A.1, 6.RP.A.2, 6.RP.A.3, 6.RP.A.3a, 6.RP.A.3b

Name: _____ Date: _____

Write a ratio in three ways. Find the unit rate. Fill in the missing value in the ratio table. Solve the unit price and speed problems.

1 **There are 1 red counters and 12 blue counters. Write the ratio of red to blue in three ways.**

---

2 **27 for 3 pens. What is the cost of 1 pen?**

$27 / 3 =$ ☐

---

3 **Fill in the missing value in the ratio table.**

Cups of flour	Cups of sugar
4	4
8	8
12	12
16	☐

Math Practice - Grade 6

M3 Ratios and unit rates

M3 6.RP.A.1, 6.RP.A.2, 6.RP.A.3, 6.RP.A.3a, 6.RP.A.3b

Name: _____ Date: _____

Write a ratio in three ways. Find the unit rate. Fill in the missing value in the ratio table. Solve the unit price and speed problems.

1 **There are 7 red counters and 3 blue counters. Write the ratio of red to blue in three ways.**

---

2 **48 for 8 pens. What is the cost of 1 pen?**

48 / 8 = ☐

---

3 **Fill in the missing value in the ratio table.**

Cups of flour	Cups of sugar
9	1
18	2
27	3
☐	4

Math Practice - Grade 6

M3 Ratios and unit rates

M3 6.RP.A.1, 6.RP.A.2, 6.RP.A.3, 6.RP.A.3a, 6.RP.A.3b

Name: _____ Date: _____

Write a ratio in three ways. Find the unit rate. Fill in the missing value in the ratio table. Solve the unit price and speed problems.

1 **There are 2 red counters and 6 blue counters. Write the ratio of red to blue in three ways.**

---

2 **A car travels 30 miles in 3 hours. What is the speed in miles per hour?**

30 / 3 = ☐

---

3 **Fill in the missing value in the ratio table.**

Cups of flour	Cups of sugar
7	6
☐	12
21	18
28	24

Math Practice - Grade 6

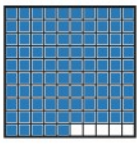
M4 Percent and measurement conversion

M4 6.RP.A.3c, 6.RP.A.3d

Name: _____ Date: _____

Find a percent of a quantity. Find the whole when a part and a percent are given. Convert the measurement.

1 **Find 95% of 220.**



95%

95% of 220 = ☐

---

2 **176 is 80% of what number?**

176 / 80% = ☐

---

3 **Convert 30 feet to inches.**

30 feet = ☐

---

4 **Find 15% of 280.**



15%

15% of 280 = ☐

Math Practice - Grade 6

M4 Percent and measurement conversion

M4 6.RP.A.3c, 6.RP.A.3d

Name: _____ Date: _____

Find a percent of a quantity. Find the whole when a part and a percent are given. Convert the measurement.

1 **Find 20% of 400.**



20%

20% of 400 = ☐

---

2 **253 is 55% of what number?**

253 / 55% = ☐

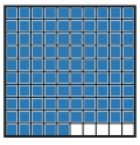
---

3 **Convert 56 feet to inches.**

56 feet = ☐

---

4 **Find 95% of 160.**



95%

95% of 160 = ☐

Math Practice - Grade 6

M4 Percent and measurement conversion

M4 6.RP.A.3c, 6.RP.A.3d

Name: _____ Date: _____

Find a percent of a quantity. Find the whole when a part and a percent are given. Convert the measurement.

1 **Find 20% of 40.**



20%

20% of 40 = ☐

---

2 **360 is 90% of what number?**

360 / 90% = ☐

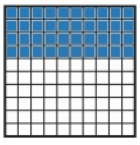
---

3 **Convert 6 feet to yards.**

6 feet = ☐

---

4 **Find 40% of 500.**



40%

40% of 500 = ☐

Math Practice - Grade 6

M5 Negative numbers and the rational number system

M5 6.NS.C.5, 6.NS.C.6, 6.NS.C.6a, 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.7, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d

Name: _____ Date: _____

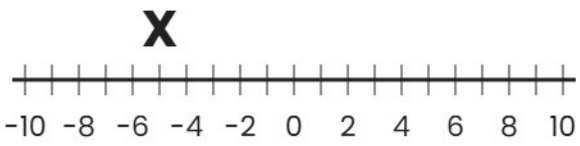
Write the opposite of a number. Read the number marked on the number line. Order the numbers from least to greatest. Compare the numbers. Find the absolute value.

1 **Write the opposite of -41.**

Opposite of -41 = ☐

---

2 **What number is marked on the number line?**



☐

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3 **Write the numbers in order from least to greatest.**

17, 34, 19, -58

☐

Math Practice - Grade 6

M5 Negative numbers and the rational number system

M5 6.NS.C.5, 6.NS.C.6, 6.NS.C.6a, 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.7, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d

Name: _____ Date: _____

Write the opposite of a number. Read the number marked on the number line. Order the numbers from least to greatest. Compare the numbers. Find the absolute value.

1 **Write the opposite of 27.**

Opposite of 27 = ☐

---

2 **What number is marked on the number line?**



☐

---

3 **Write the numbers in order from least to greatest.**

-62, -79, 69, -53

☐

Math Practice - Grade 6

M5 Negative numbers and the rational number system

M5 6.NS.C.5, 6.NS.C.6, 6.NS.C.6a, 6.NS.C.6b, 6.NS.C.6c, 6.NS.C.7, 6.NS.C.7a, 6.NS.C.7b, 6.NS.C.7c, 6.NS.C.7d

Name: _____ Date: _____

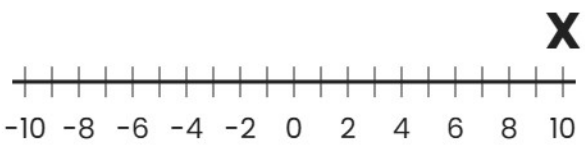
Write the opposite of a number. Read the number marked on the number line. Order the numbers from least to greatest. Compare the numbers. Find the absolute value.

1 **Write the opposite of 7.**

Opposite of 7 = ☐

---

2 **What number is marked on the number line?**



☐

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3 **Write the numbers in order from least to greatest.**

-75, -36, -29, -43

☐

Math Practice - Grade 6

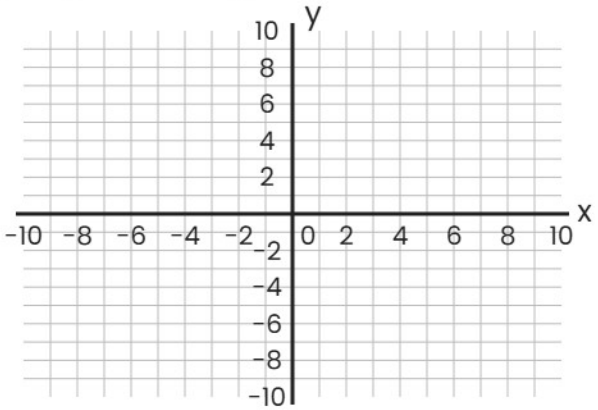
M6 The coordinate plane

M6 6.NS.C.8, 6.G.A.3

Name: _____ Date: _____

Plot the point on the grid. Name the quadrant of the plotted point. Find the distance between the two points. Draw the polygon and find the side length.

1 **Plot the point (-5, -7) on the grid.**



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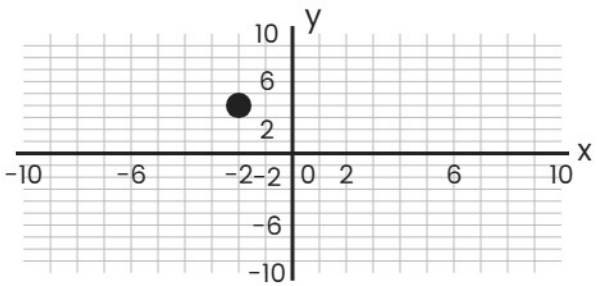
2 **In which quadrant is the plotted point? Circle it.**



I	II	III	IV

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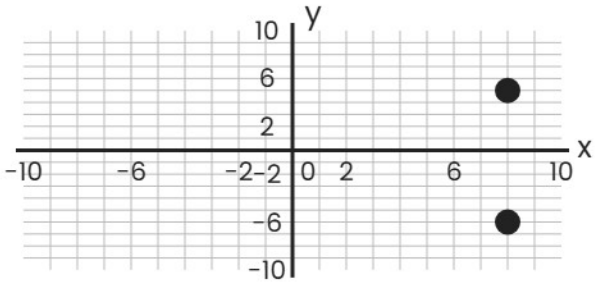
3 **Find the distance between (8, -6) and (8, 5).**



Math Practice - Grade 6

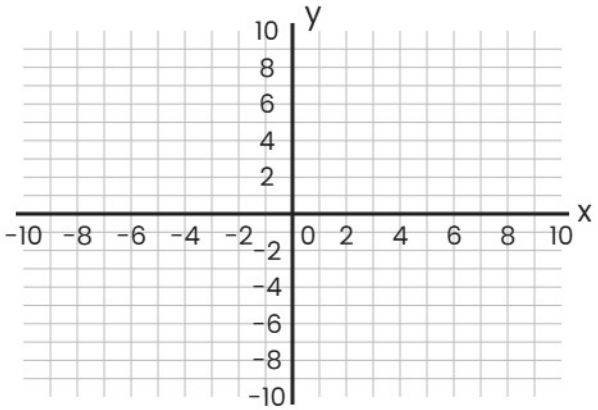
M6 The coordinate plane

M6 6.NS.C.8, 6.G.A.3

Name: _____ Date: _____

Plot the point on the grid. Name the quadrant of the plotted point. Find the distance between the two points. Draw the polygon and find the side length.

1 **Plot the point (-7, -7) on the grid.**



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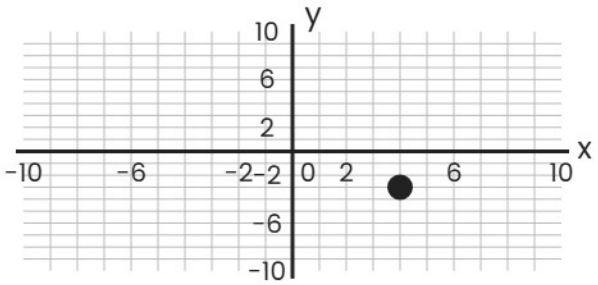
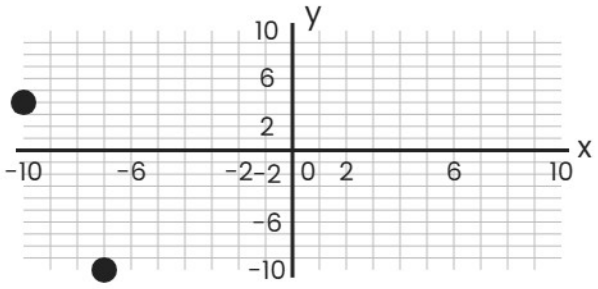
2 **In which quadrant is the plotted point? Circle it.**



I	II	III	IV

---

3 **Find the distance between (-7, -10) and (-10, 4).**



Math Practice - Grade 6

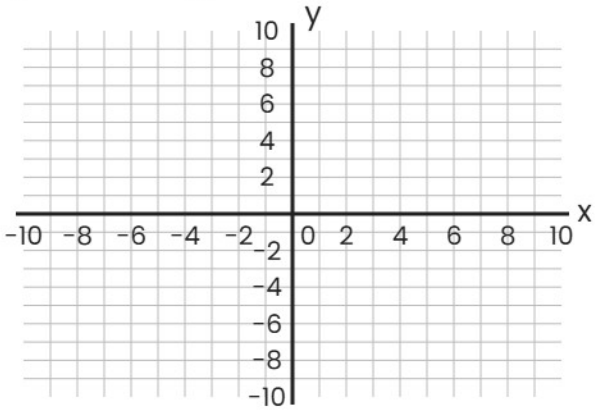
M6 The coordinate plane

M6 6.NS.C.8, 6.G.A.3

Name: _____ Date: _____

Plot the point on the grid. Name the quadrant of the plotted point. Find the distance between the two points. Draw the polygon and find the side length.

1 **Plot the point (3, 9) on the grid.**



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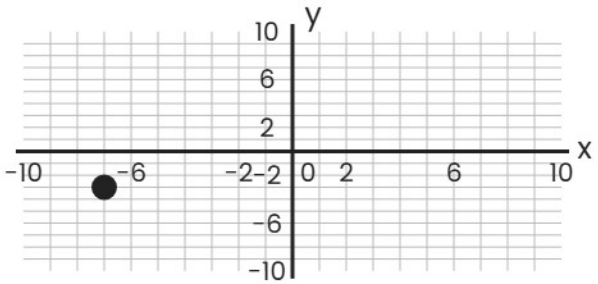
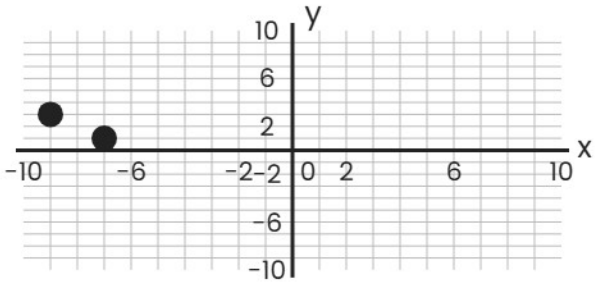
2 **In which quadrant is the plotted point? Circle it.**



I	II	III	IV

---

3 **Find the distance between (-7, 1) and (-9, 3).**



Math Practice - Grade 6

M7 Expressions, exponents, order of operations

M7 6.EE.A.1, 6.EE.A.2, 6.EE.A.2a, 6.EE.A.2b, 6.EE.A.2c

Name: _____ Date: _____

Write the power as repeated multiplication and work it out. Write the expression the words describe. Name the part of the expression. Work out the expression for the given value.

1 Write 10 to the power 2 as repeated multiplication, then work it out.

$10 \times 10 =$ ☐

---

2 Write the expression the words describe: The product of 6 and x.

☐

---

3 How many terms does 5x + 4x + 4 have?

☐

---

4 Work out $y^2 + 8$ when y = 8.

$y^2 + 8 =$ ☐

Math Practice - Grade 6

M7 Expressions, exponents, order of operations

M7 6.EE.A.1, 6.EE.A.2, 6.EE.A.2a, 6.EE.A.2b, 6.EE.A.2c

Name: _____ Date: _____

Write the power as repeated multiplication and work it out. Write the expression the words describe. Name the part of the expression. Work out the expression for the given value.

1 Write 2 to the power 3 as repeated multiplication, then work it out.

$2 \times 2 \times 2 =$ ☐

---

2 Write the expression the words describe: y divided by 5.

☐

---

3 Name one factor in 9x x 2.

☐

---

4 Work out 9y - 6 when y = 2.

$9y - 6 =$ ☐

Math Practice - Grade 6

M7 Expressions, exponents, order of operations

M7 6.EE.A.1, 6.EE.A.2, 6.EE.A.2a, 6.EE.A.2b, 6.EE.A.2c

Name: _____ Date: _____

Write the power as repeated multiplication and work it out. Write the expression the words describe. Name the part of the expression. Work out the expression for the given value.

1 Write 9 to the power 2 as repeated multiplication, then work it out.

$9 \times 9 =$ ☐

---

2 Write the expression the words describe: Twice x, plus 12.

☐

---

3 How many terms does 8y + 5y + 5 have?

☐

---

4 Work out 3(y + 6) when y = 4.

$3(y + 6) =$ ☐

Math Practice - Grade 6

M8 Equivalent expressions

M8 6.EE.A.3, 6.EE.A.4

Name: _____ Date: _____

Expand with the distributive property. Factor out the common factor. Combine the like terms. Test whether the two expressions are equivalent.

1 **Expand 2 (8 + y).**

$2\,(8 + y) =$ ☐

---

2 **Factor 27y + 12.**

$27y + 12 =$ ☐

---

3 **Combine the like terms in 5y + 1 + 4y.**

$5y + 1 + 4y =$ ☐

---

4 **Work out both expressions when y = 4. Are 2 (6 + y) and 12 + 2y equivalent? Circle Yes or No.**

$2\,(6 + y) = 20$ $12 + 2y = 20$

Yes No

Math Practice - Grade 6

M8 Equivalent expressions

M8 6.EE.A.3, 6.EE.A.4

Name: _____ Date: _____

Expand with the distributive property. Factor out the common factor. Combine the like terms. Test whether the two expressions are equivalent.

1 **Expand 5 (9 + y).**

$5\ (9 + y) =$ ☐

---

2 **Factor 45y + 15.**

$45y + 15 =$ ☐

---

3 **Combine the like terms in 9x + 6 + 9x.**

$9x + 6 + 9x =$ ☐

---

4 **Work out both expressions when y = 1. Are 2 (2 + y) and 4 + 2y equivalent? Circle Yes or No.**

$2\ (2 + y) = 6$ $4 + 2y = 6$

Yes No

Math Practice - Grade 6

M8 Equivalent expressions

M8 6.EE.A.3, 6.EE.A.4

Name: _____ Date: _____

Expand with the distributive property. Factor out the common factor. Combine the like terms. Test whether the two expressions are equivalent.

1 **Expand 8 (9 + y).**

$8\ (9 + y) =$ ☐

---

2 **Factor 12y + 27.**

$12y + 27 =$ ☐

---

3 **Combine the like terms in 4y + 5 + 2y.**

$4y + 5 + 2y =$ ☐

---

4 **Work out both expressions when x = 5. Are 4 (4 + x) and 16 + 4x equivalent? Circle Yes or No.**

$4\ (4 + x) = 36$ $16 + 4x = 36$

Yes No

Math Practice - Grade 6

M9 Equations and inequalities

M9 6.EE.B.5, 6.EE.B.6, 6.EE.B.7, 6.EE.B.8

Name: _____ Date: _____

Test whether the number is a solution. Solve the equation. Write the inequality the words describe and graph it on the number line.

1 **Is 10 a solution of x + 1 = 8? Circle Yes or No.**

$10 + 1 = 11 \quad x + 1 = 8$

Yes No

---

2 **Solve x + 4 = 18.**

$x + 4 = 18 \quad x =$ ☐

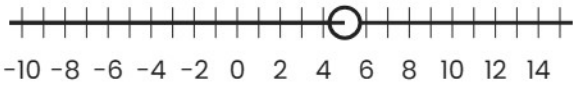
---

3 **Solve 6x = 66.**

$6x = 66 \quad x =$ ☐

---

4 **Write the inequality the words describe: x is less than 5.**



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Math Practice - Grade 6

M9 Equations and inequalities

M9 6.EE.B.5, 6.EE.B.6, 6.EE.B.7, 6.EE.B.8

Name: _____ Date: _____

Test whether the number is a solution. Solve the equation. Write the inequality the words describe and graph it on the number line.

1 **Is 4 a solution of x + 11 = 13? Circle Yes or No.**

$4 + 11 = 15$ $x + 11 = 13$

Yes No

---

2 **Solve x + 1 = 13.**

$x + 1 = 13$ $x =$ ☐

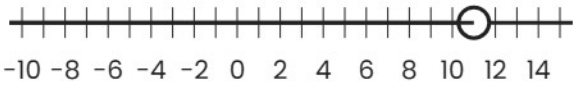
---

3 **Solve 10x = 70.**

$10x = 70$ $x =$ ☐

---

4 **Write the inequality the words describe: x is less than 11.**



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Math Practice - Grade 6

M9 Equations and inequalities

M9 6.EE.B.5, 6.EE.B.6, 6.EE.B.7, 6.EE.B.8

Name: _____ Date: _____

Test whether the number is a solution. Solve the equation. Write the inequality the words describe and graph it on the number line.

1 **Is 4 a solution of x + 2 = 6? Circle Yes or No.**

$4 + 2 = 6$ $x + 2 = 6$

Yes No

---

2 **Solve x + 1 = 3.**

$x + 1 = 3$ $x =$ ☐

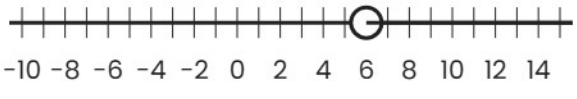
---

3 **Solve 8x = 64.**

$8x = 64$ $x =$ ☐

---

4 **Write the inequality the words describe: x is greater than 6.**



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Math Practice - Grade 6

M10 Dependent and independent variables

M10 6.EE.C.9

Name: _____ Date: _____

Name the independent and the dependent quantity. Write the equation. Fill in the missing value in the table. Plot the values on the graph.

1 Each ticket costs 8. Which quantity is independent, and which is dependent?

Each ticket costs 8.

Independent:

Dependent:

---

2 Leo earns 15 every hour he works. Write the equation that links the two quantities.

Leo earns 15 every hour he works.

---

3 A train travels at a steady speed of 40 miles per hour. Fill in the missing value in the table.

time in hours	distance in miles
1	40
2	80
3	
4	160

Math Practice - Grade 6

M10 Dependent and independent variables

M10 6.EE.C.9

Name: _____ Date: _____

Name the independent and the dependent quantity. Write the equation. Fill in the missing value in the table. Plot the values on the graph.

1 Each box holds 12 pencils. Which quantity is independent, and which is dependent?

Each box holds 12 pencils.

Independent:

Dependent:

---

2 Each box holds 12 pencils. Write the equation that links the two quantities.

Each box holds 12 pencils.

---

3 Each bag holds 6 apples. Fill in the missing value in the table.

number of bags	total number of apples
1	6
2	12
3	
4	24

Math Practice - Grade 6

M10 Dependent and independent variables

M10 6.EE.C.9

Name: _____ Date: _____

Name the independent and the dependent quantity. Write the equation. Fill in the missing value in the table. Plot the values on the graph.

1 Each ticket costs 8. Which quantity is independent, and which is dependent?

Each ticket costs 8.

Independent:

Dependent:

---

2 A train travels at a steady speed of 40 miles per hour. Write the equation that links the two quantities.

A train travels at a steady speed of 40 miles per hour.

---

3 Maya reads 3 pages every minute. Fill in the missing value in the table.

time in minutes	pages read
1	3
2	6
3	9
4	

Math Practice - Grade 6

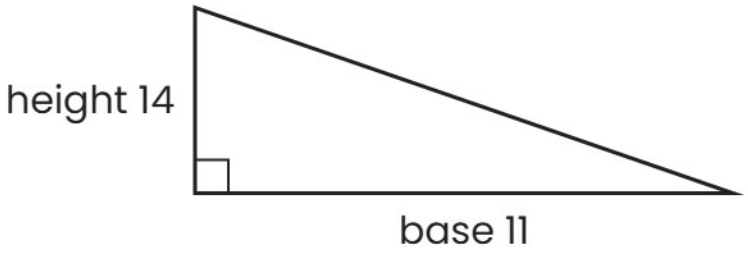
M11 Area of triangles and polygons

M11 6.G.A.1

Name: _____ Date: _____

Find the area of the triangle, the parallelogram, and the trapezoid. Split the polygon into parts and add their areas.

1 **Find the area of the triangle.**



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2 **Find the area of the parallelogram.**



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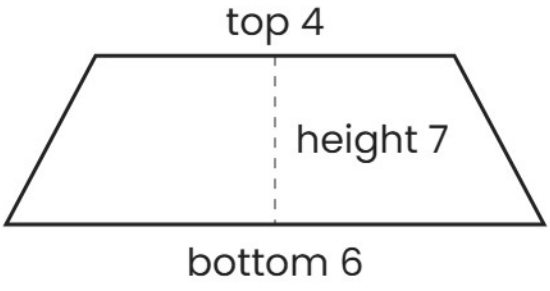
3 **Find the area of the trapezoid.**



Math Practice - Grade 6

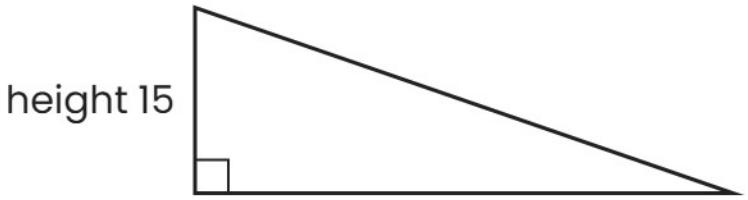
M11 Area of triangles and polygons

M11 6.G.A.1

Name: _____ Date: _____

Find the area of the triangle, the parallelogram, and the trapezoid. Split the polygon into parts and add their areas.

1 **Find the area of the triangle.**



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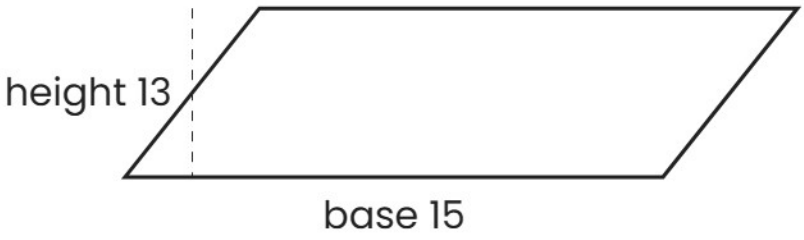
2 **Find the area of the parallelogram.**



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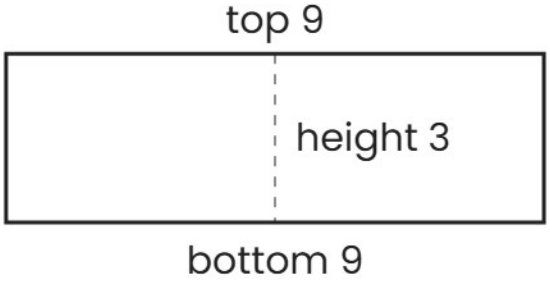
3 **Find the area of the trapezoid.**



Math Practice - Grade 6

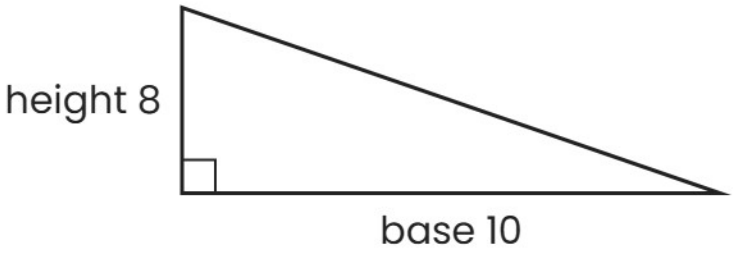
M11 Area of triangles and polygons

M11 6.G.A.1

Name: _____ Date: _____

Find the area of the triangle, the parallelogram, and the trapezoid. Split the polygon into parts and add their areas.

1 **Find the area of the triangle.**



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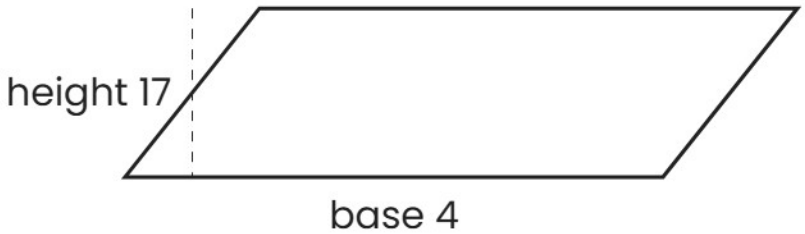
2 **Find the area of the parallelogram.**



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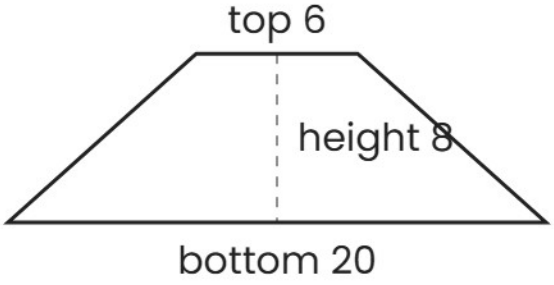
3 **Find the area of the trapezoid.**



Math Practice - Grade 6

M12 Volume and surface area

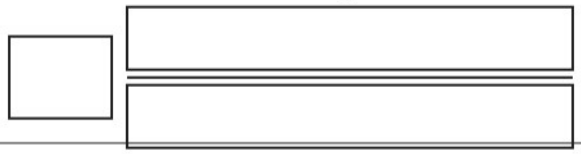
M12 6.G.A.2, 6.G.A.4

Name: _____ Date: _____

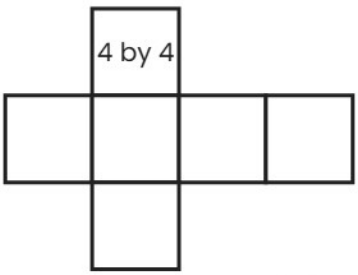
Multiply the edge lengths to find the volume. Name the solid from its net. Add the face areas to find the surface area.

1 **Find the volume of the rectangular prism. The edges are 3 1/3, 7 2/3, and 3 1/2.**

$$3\frac{1}{3} \times 7\frac{2}{3} \times 3\frac{1}{2} =$$

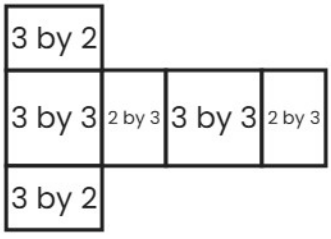


2 **What solid does this net make? Circle it.**



Cube | Rectangular prism | Triangular prism | Square pyramid

3 **Find the surface area of the rectangular prism from its net. The edges are 3, 2, and 3.**



Math Practice - Grade 6

M12 Volume and surface area

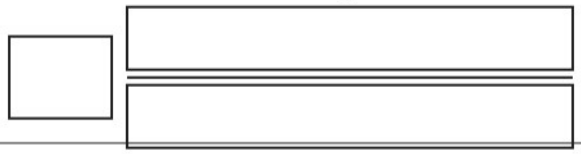
M12 6.G.A.2, 6.G.A.4

Name: _____ Date: _____

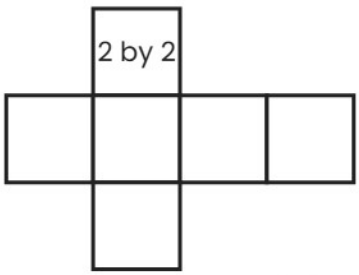
Multiply the edge lengths to find the volume. Name the solid from its net. Add the face areas to find the surface area.

1 **Find the volume of the rectangular prism. The edges are 1, 1 1/3, and 7.**

$$1 \quad x \quad 1\frac{1}{3} \quad x \quad 7 \quad =$$

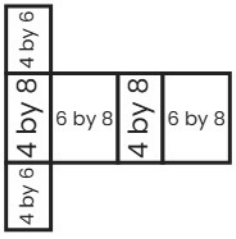


2 **What solid does this net make? Circle it.**



Cube | Rectangular prism | Triangular prism | Square pyramid

3 **Find the surface area of the rectangular prism from its net. The edges are 4, 6, and 8.**



Math Practice - Grade 6

M12 Volume and surface area

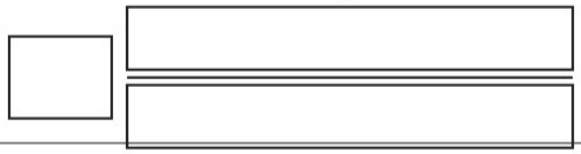
M12 6.G.A.2, 6.G.A.4

Name: _____ Date: _____

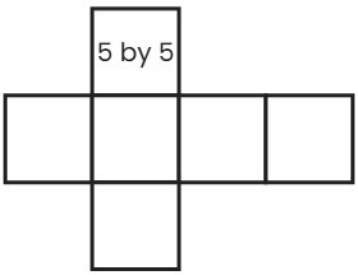
Multiply the edge lengths to find the volume. Name the solid from its net. Add the face areas to find the surface area.

1 **Find the volume of the rectangular prism. The edges are 3 1/3, 8 2/3, and 6 2/3.**

$3\frac{1}{3}$ x $8\frac{2}{3}$ x $6\frac{2}{3}$ =

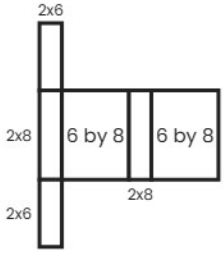


2 **What solid does this net make? Circle it.**



Cube | Rectangular prism | Triangular prism | Square pyramid

3 **Find the surface area of the rectangular prism from its net. The edges are 2, 6, and 8.**



Math Practice - Grade 6

M13 Statistics: questions, data, and displays

M13 6.SP.A.1, 6.SP.A.2, 6.SP.A.3, 6.SP.B.4, 6.SP.B.5, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.5d

Name: _____ Date: _____

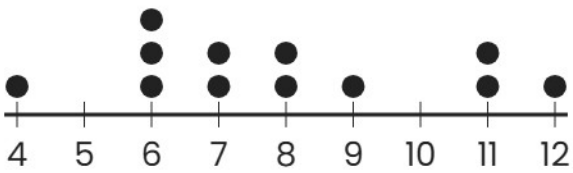
Is the question statistical? Read the dot plot. Find the mean or the median. Find the range, the interquartile range, or the mean absolute deviation.

1 How tall are the students in your class? Is this a statistical question? Circle Statistical or Not statistical.

Statistical | Not statistical

---

2 How many values are greater than 7?



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3 Find the mean of the data set.

36, 41, 11, 25, 35, 8, 11, 15, 16

Math Practice - Grade 6

M13 Statistics: questions, data, and displays

M13 6.SP.A.1, 6.SP.A.2, 6.SP.A.3, 6.SP.B.4, 6.SP.B.5, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.5d

Name: _____ Date: _____

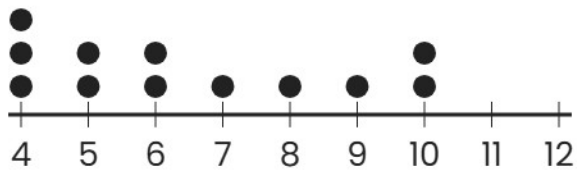
Is the question statistical? Read the dot plot. Find the mean or the median. Find the range, the interquartile range, or the mean absolute deviation.

1 What time does school start? Is this a statistical question? Circle Statistical or Not statistical.

Statistical	Not statistical

---

2 How many observations are in the dot plot?



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3 Find the median of the data set.

32, 41, 13, 38, 40, 36, 1, 31

Math Practice - Grade 6

M13 Statistics: questions, data, and displays

M13 6.SP.A.1, 6.SP.A.2, 6.SP.A.3, 6.SP.B.4, 6.SP.B.5, 6.SP.B.5a, 6.SP.B.5b, 6.SP.B.5c, 6.SP.B.5d

Name: _____ Date: _____

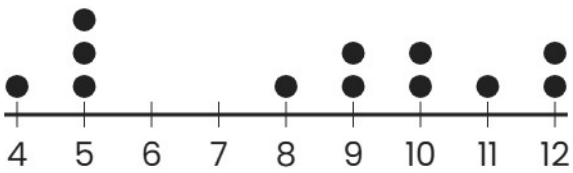
Is the question statistical? Read the dot plot. Find the mean or the median. Find the range, the interquartile range, or the mean absolute deviation.

1 How much do the bags in the class weigh? Is this a statistical question? Circle Statistical or Not statistical.

Statistical	Not statistical

---

2 How many observations are in the dot plot?



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3 Find the mean of the data set.

3, 10, 23, 0, 36, 42