Math Practice - Grade 6

M8 Equivalent expressions - Test whether expressions are equivalent

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

Name: _____ Date: _____

Work out both expressions for the given value. Are they equivalent? Circle Yes or No.

Example: Work out both expressions when x = 1. Are 5 (6 + x) and 30 + 5x equivalent? Circle Yes or No.

How: Put the same value in both expressions. If the two values match, the expressions are equivalent for that value, and the test supports that they are equivalent.

$5\ (6 + x) = 35$ $30 + 5x = 35$

(Yes) No

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1 **Work out both expressions when y = 4. Are 3 (3 + y) and 9 + 3y equivalent? Circle Yes or No.**

$3\ (3 + y) = 21$ $9 + 3y = 21$

Yes No

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2 **Work out both expressions when x = 3. Are 3 (3 + x) and 9 + 3x equivalent? Circle Yes or No.**

$3\ (3 + x) = 18$ $9 + 3x = 18$

Yes No

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3 **Work out both expressions when x = 3. Are 2 (7 + x) and 14 + 2x equivalent? Circle Yes or No.**

$2\ (7 + x) = 20$ $14 + 2x = 20$

Yes No

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Name: _____ Date: _____

Work out both expressions for the given value. Are they equivalent? Circle Yes or No.

Example: Work out both expressions when y = 3. Are 4 (4 + y) and 17 + 4y equivalent? Circle Yes or No.

How: Put the same value in both expressions. If the two values match, the expressions are equivalent for that value, and the test supports that they are equivalent.

$4\ (4 + y) = 28$ $17 + 4y = 29$

Yes (No)

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1 **Work out both expressions when x = 5. Are 4 (4 + x) and 17 + 4x equivalent? Circle Yes or No.**

$4\ (4 + x) = 36$ $17 + 4x = 37$

Yes No

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2 **Work out both expressions when x = 5. Are 2 (6 + x) and 12 + 2x equivalent? Circle Yes or No.**

$2\ (6 + x) = 22$ $12 + 2x = 22$

Yes No

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3 **Work out both expressions when x = 2. Are 3 (3 + x) and 9 + 3x equivalent? Circle Yes or No.**

$3\ (3 + x) = 15$ $9 + 3x = 15$

Yes No

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Name: _____ Date: _____

Work out both expressions for the given value. Are they equivalent? Circle Yes or No.

Example: Work out both expressions when y = 5. Are 4 (9 + y) and 37 + 4y equivalent? Circle Yes or No.

How: Put the same value in both expressions. If the two values match, the expressions are equivalent for that value, and the test supports that they are equivalent.

4 (9 + y) = 56 37 + 4y = 57

Yes (No)

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1 **Work out both expressions when y = 2. Are 4 (7 + y) and 29 + 4y equivalent? Circle Yes or No.**

4 (7 + y) = 36 29 + 4y = 37

Yes No

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2 **Work out both expressions when y = 2. Are 4 (2 + y) and 9 + 4y equivalent? Circle Yes or No.**

4 (2 + y) = 16 9 + 4y = 17

Yes No

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3 **Work out both expressions when x = 1. Are 4 (5 + x) and 21 + 4x equivalent? Circle Yes or No.**

4 (5 + x) = 24 21 + 4x = 25

Yes No