

# Numerical Expressions

Grade 5 Algebra Worksheet

Date: \_\_\_\_\_

Name: \_\_\_\_\_

## LET'S MAKE LEARNING FUN

1. Circle each expression that is not equivalent to the expression in **bold**.

a.  **$37 \times 19$**

$(30 \times 19) - (7 \times 29)$	<b>37 nineteens</b>	$37 \times (20 - 1)$	$(40 - 2) \times 19$
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b.  **$26 \times 35$**

35 twenty-sixes	$(26 + 30) \times (26 + 5)$	$(26 \times 30) + (26 \times 5)$	<b><math>35 \times (20 + 60)</math></b>
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c.  **$34 \times 89$**

$34 \times (80 + 9)$	$(34 \times 8) + (34 \times 9)$	$34 \times (90 - 1)$	89 twenty-sixes
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2. Solve mentally.

a. $16 \times 99 =$ _____
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b. $20 \times 101 =$ _____
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3. Circle the expression equivalent to the *difference* between 7 and 4, divided by a *fifth*.

$7 + \left(4 + \frac{1}{5}\right)$	$\frac{7 - 4}{5}$	$(7 - 4) \div \frac{1}{5}$	$\frac{1}{5} \div (7 - 4)$
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4. Circle the expression(s) equivalent to 42 divided by the sum of  $\frac{2}{3}$  and  $\frac{3}{4}$ .

$\left(\frac{2}{3} + \frac{3}{4}\right) \div 42$	$\left(42 \div \frac{2}{3}\right) + \frac{3}{4}$	$42 \div \left(\frac{2}{3} + \frac{3}{4}\right)$	$\frac{42}{\frac{2}{3} + \frac{3}{4}}$
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5. Write the equivalent numerical expression:

**A fourth as much as the sum of  $3\frac{1}{8}$  and 4.5:** \_\_\_\_\_

## Numerical Expressions

### Grade 5 Algebra Worksheet

1. Circle each expression that is not equivalent to the expression in **bold**.

a.  **$37 \times 19$**

Answer

$(30 \times 19) - (7 \times 29)$ 
   37 nineteens
    **$37 \times (20 - 1)$** 
 $(40 - 2) \times 19$

You will get the answer above and know they are not equivalent to the expression in **bold** when you carefully work out all the provided options.

b.  **$26 \times 35$**

Answer

35 twenty-sixes
    $(26 + 30) \times (26 + 5)$ 
    **$(26 \times 30) + (26 \times 5)$**

$35 \times (20 + 60)$

You will get the answer above and know they are not equivalent to the expression in **bold** when you carefully work out all the provided options.

c.  $34 \times 89$

Answer

$34 \times (80 + 9)$

$(34 \times 8) + (34 \times 9)$

$34 \times (90 - 1)$

89 twenty-sixes

You will get the answer above and know they are not equivalent to the expression in **bold** when you carefully work out all the provided options.

2. Solve mentally.

Answer

a.  $16 \times 99 = \mathbf{1584}$

b.  $20 \times 101 = \mathbf{2020}$

3. Circle the expression(s) equivalent to the *difference* between 7 and 4, divided by a *fifth*.

$7 + \left(4 + \frac{1}{5}\right)$

$\frac{7 - 4}{5}$

$(7 - 4) \div \frac{1}{5}$

$\frac{1}{5} \div (7 - 4)$

4. Circle the expression(s) equivalent to 42 divided by the sum of  $\frac{2}{3}$  and  $\frac{3}{4}$ .

Answer

$\left(\frac{2}{3} + \frac{3}{4}\right) \div 42$

$\left(42 \div \frac{2}{3}\right) + \frac{3}{4}$

$42 \div \left(\frac{2}{3} + \frac{3}{4}\right)$

$\frac{42}{\frac{2}{3} + \frac{3}{4}}$

5. Write the equivalent numerical expression:

**A fourth as much as the sum of  $3\frac{1}{8}$  and 4.5:** \_\_\_\_\_

Answers will vary and could include the following:

$$\frac{1}{4} \times \left( 3\frac{1}{8} + 4.5 \right);$$

$$\frac{\left( 3\frac{1}{8} + 4.5 \right)}{4};$$

$$\left( 3\frac{1}{8} + 4.5 \right) \div 4$$