



Mathematics 8

Formative Quiz 3

Student Name: _____

N5 Solve math problems with rate, ratio, and proportion.

1. Two out of three of the animals at a pet store are fish. How many of the 99 animals at the pet store are fish?

Ⓐ 16.5 fish

Ⓑ 33 fish

Ⓒ 66 fish

Ⓓ 94 fish

N5 Solve math problems with rate, ratio, and proportion.

2. Create a proportion for the following problem:

A cake recipe needs 3 cups of flour for every 2 cups of milk. The bakers use 18 cups of flour, how many cups of milk will they need?

Ⓐ
$$\frac{2 \text{ cups of milk}}{18 \text{ cups of flour}} = \frac{3 \text{ cups of flour}}{x}$$

Ⓑ
$$\frac{3 \text{ cups of flour}}{2 \text{ cups of milk}} = \frac{x}{18 \text{ cups of flour}}$$

Ⓒ
$$\frac{3 \text{ cups of flour}}{2 \text{ cups of milk}} = \frac{18 \text{ cups of flour}}{x}$$

Ⓓ
$$\frac{3 \text{ cups of flour}}{18 \text{ cups of flour}} = \frac{x}{2 \text{ cups of milk}}$$

N6 Multiply and divide fractions and mixed numbers.

3. Calculate:

$$\frac{2}{3} + \frac{5}{9} \div \frac{2}{3} - \frac{1}{6}$$

Ⓐ $1\frac{2}{3}$

Ⓑ $1\frac{1}{3}$

Ⓒ $1\frac{4}{15}$

Ⓓ $1\frac{1}{15}$

N6 Multiply and divide fractions and mixed numbers.

4. Calculate:

$$\frac{1}{3} + 2\frac{2}{3} \div \frac{3}{4} - \frac{5}{6}$$

Ⓐ $4\frac{2}{3}$

Ⓑ $3\frac{4}{18}$

Ⓒ $3\frac{1}{18}$

Ⓓ $1\frac{1}{2}$

N7 Multiply and divide integers.

5. Calculate:

$$-6 \times (-7) - (-10) \div 2$$

- Ⓐ 26
- Ⓑ 47
- Ⓒ -9
- Ⓓ -37

N7 Multiply and divide integers.

6. Calculate:

$$7 \times (-3) - (-25) \div (-5)$$

Ⓐ -26

Ⓑ -16

Ⓒ -0.8

Ⓓ 16

PR2 Model and solve problems using equations.

7. Solve:

$$25=4(m-5)+17$$

Ⓐ $m=5.75$

Ⓑ $m=3.25$

Ⓒ $m=9$

Ⓓ $m=7$

PR2 Model and solve problems using equations.

8. Select the equation for the following situation:

Together Mike and Sara have 15 cookies. Mike has twice as many as Sara.

- Ⓐ $2x = 15$
- Ⓑ $2x + x = 15$
- Ⓒ $2x - x = 15$
- Ⓓ $x + x + 2 = 15$

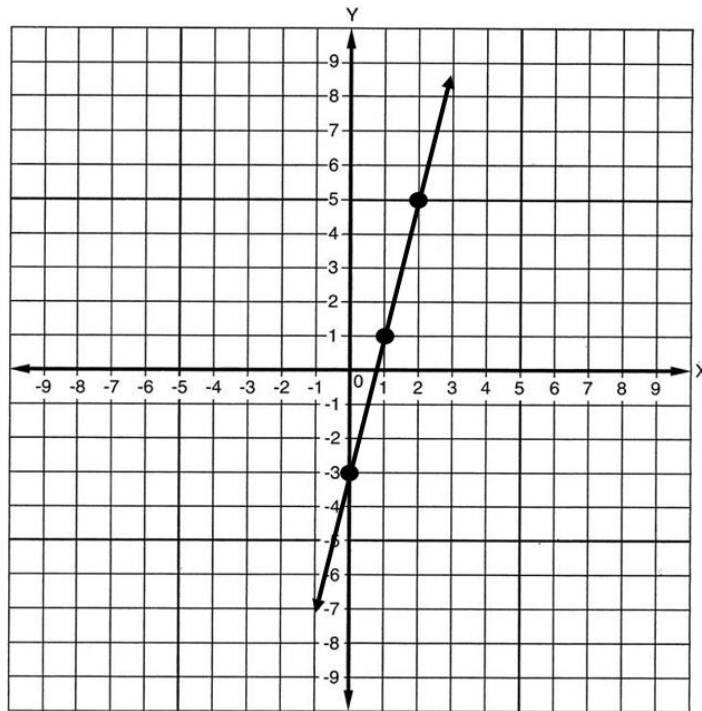
SS1 Know the Pythagorean Theorem, how it works, and how to use it in problem solving.

9. The bottom of a ladder that is 18 m long must be placed 7 m from a wall. How far above the ground does the ladder touch the wall?
Round all decimals to the nearest meter.

- Ⓐ 245 m
- Ⓑ 147 m
- Ⓒ 16 m
- Ⓓ 12 m

PR1 Be able to analyze and graph an equation with two variables.

10. Which equation represents the following graph?



- Ⓐ $3x - 4 = y$
- Ⓑ $4x - 3 = y$
- Ⓒ $4x + 3 = y$
- Ⓓ $3x + 4 = y$

Mathematics 8

1. Ⓐ Ⓑ Ⓒ Ⓓ
2. Ⓐ Ⓑ Ⓒ Ⓓ
3. Ⓐ Ⓑ Ⓒ Ⓓ
4. Ⓐ Ⓑ Ⓒ Ⓓ
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