

Today is 11/7/17
Get out Note Packet, Ruler & Calculator
Goal: Review for test

Agenda:
Brain Teaser
Finish Staircase
p. 25&26 Review Sheet

HW: finish p.
25&26

Test Tuesday
11/14 and
Wednesday 11/15

Work on Review Sheet #1: p. 25 & 26

Finish For HW if not done in class

1. no

6. $y = 2$

2. yes

13. 1, 100%

3. yes

14. $4/3$, 133%

4. $a = -15/7$

15. $3/4$, 75%

5. $x = 25$

17. Answers given
tomorrow

7-12:

answers

given

tomorrow

Use cross products to determine whether each pair of ratios form a proportion.

Write yes or no.

1. $\frac{1}{3}, \frac{33}{100}$

$$3 \cdot 33 = 1 \cdot 100$$

$$99 \neq 100$$

NO

2. $\frac{4.5}{-5}, \frac{-153}{170}$

$$4.5(170) = -5(-153)$$

$$765 = 765 \checkmark$$

3. $\frac{1}{8}, \frac{5}{40}$

$$40 = 40$$

YES

Solve each proportion. If necessary, round to the nearest thousandth.

4. $\frac{2}{a} = \frac{-14}{15}$

$$\frac{30}{-14} = \frac{-14a}{-14}$$

$$\boxed{-\frac{15}{7} = a}$$

5. $\frac{15}{2x} = \frac{3}{10}$

$$\frac{150}{6} = \frac{6x}{6}$$

$$\boxed{25 = x}$$

6. $\frac{1}{y+7} = \frac{8}{72}$

$$\begin{array}{r} 72 = 8(y+7) \\ 72 = 8y + 56 \\ -56 \quad -56 \end{array}$$

$$\frac{16}{8} = \frac{8y}{8}$$

$$\boxed{2 = y}$$

Plot each point on a coordinate plane.

7. $A(2,5)$

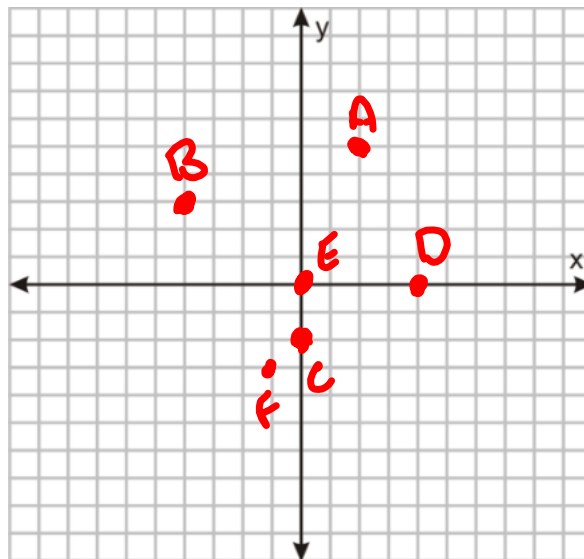
8. $B(-4,3)$

9. $C(0,-2)$

10. $D(4,0)$

11. $E(0,0)$

12. $F(-1,-3)$



Find the **slope** and the **percent grade**. If necessary, round the percent to the nearest integer.

13. (2,4), (5,7)

$$\frac{7-4}{5-2} = \frac{3}{3} = 1$$

$$100\%$$

14. (0,0), (3,4)

$$\frac{4-0}{3-0} = \frac{4}{3}$$

$$133\%$$

15. (2,5), (6,8)

$$\frac{8-5}{6-2} = \frac{3}{4}$$

$$75\%$$

17. The slope of a stairway determines how easy it is to climb the stairs. Assume that a stairway has 9 steps. The rise of each stair is 7 inches and the tread is 11 inches.

a. What is the slope of the stairway?

$$\underline{7/11}$$

b. What is the total length and height of the stairway?

$$\underline{63}$$
$$\underline{99}$$

c. What is the slope of the entire stairway?

$$\underline{63/99}$$

d. What is the percent grade of the stairway?

$$\underline{64\%}$$