

Name: _____

Date: _____

A& W Math 10

Initial Assignment (Math 8 & 9 Review)

Multiple Choice

Identify the choice that best completes the statement or answers the question.

_____ 1. Convert 230% to a decimal.

- a. 2.3
- b. 1.21
- c. 23
- d. 5.48

_____ 2. What is 89% of 1250?

- a. 1112.5
- b. 1404.49
- c. 111250
- d. 0.07

_____ 3. Simplify $\frac{98}{84}$ to the lowest terms.

- a. $\frac{7}{6}$
- b. $\frac{98}{5}$
- c. Already in lowest terms.
- d. $\frac{6}{7}$

_____ 4. Solve for x.

$$x = \frac{3}{4} + \frac{3}{8}$$

- a. $\frac{19}{16}$
- b. $\frac{9}{8}$
- c. $\frac{17}{16}$
- d. $\frac{5}{4}$

_____ 5. Solve for x.

$$x = \frac{1}{2} - \frac{2}{16}$$

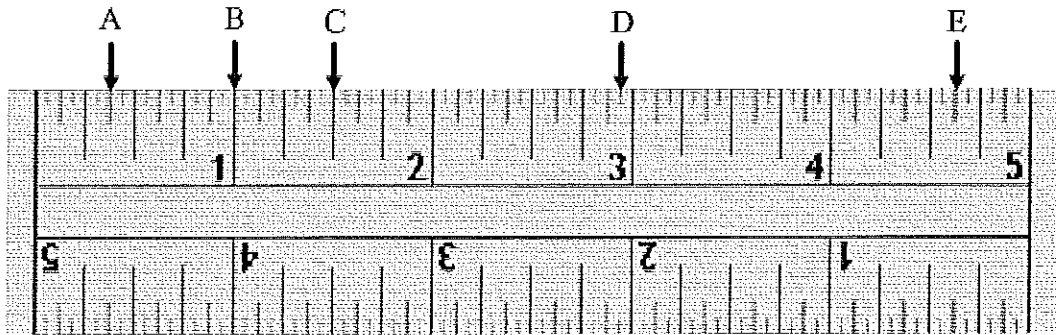
- a. $\frac{5}{16}$
- b. $\frac{1}{2}$
- c. $\frac{3}{8}$
- d. $\frac{7}{16}$

_____ 6. Solve for x.

$$x = \frac{5}{4} - \frac{4}{16}$$

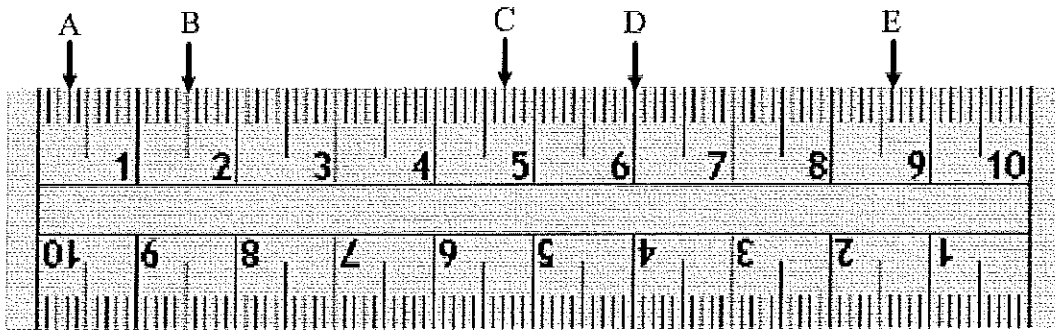
- a. $\frac{17}{16}$
- b. $\frac{33}{32}$
- c. $\frac{31}{32}$
- d. 1

7. What is the value of A?



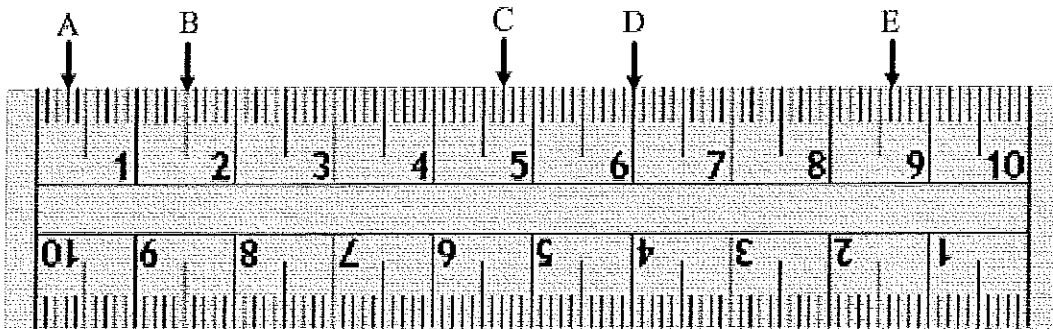
- a. 1"
- b. $\frac{3}{8}$ "
- c. $1\frac{1}{2}$ "
- d. $2\frac{15}{16}$ "

8. What is the value of C?



- a. 1.5 cm
- b. 0.3 cm
- c. 4.7 cm
- d. 6 cm

9. What is the value of E?



- a. 15 mm
- b. 60 mm
- c. 86 mm
- d. 47 mm

_____ 10. Solve for x .

$$x = 5\frac{3}{8} - \frac{1}{2}$$

a. 5

b. $4\frac{7}{8}$

c. $4\frac{15}{16}$

d. $4\frac{13}{16}$

_____ 11. Which of the following is equivalent to $\frac{12}{13}$?

a. $\frac{48}{47}$

b. $\frac{48}{52}$

c. $\frac{50}{52}$

d. $\frac{47}{57}$

_____ 12. Which of the following is equivalent to $\frac{40}{25}$?

a. $\frac{10}{8}$

b. $\frac{8}{5}$

c. $\frac{7}{10}$

d. $\frac{5}{7}$

_____ 13. A restaurant's soup recipe contains:

- 12.5 cups of chicken broth
- 3.75 cups of chopped chicken
- 6.25 cups of diced vegetables
- 2.5 cups of noodles

What is the simplified ratio of noodles to chicken broth?

a. 2:10

b. 10:2

c. 1:5

d. 5:1

_____ 14. A mixture of juice concentrate and water are used to make a jug of juice. If the jug contains 0.75 L of juice and 150 mL of juice concentrate, what is the ratio of juice to water?

a. 5:1

b. 1:5

c. 1:4

d. 4:1

_____ 15. A vegetable garden contains 9 tomato plants, 5 bean plants, and 5 zucchini plants. The tomato plants make up what fraction of the plants?

a. $\frac{5}{19}$

b. $\frac{5}{19}$

c. $\frac{19}{9}$

d. $\frac{9}{19}$

_____ 16. Estimate $\sqrt{52}$.

- a. 8
- b. 7

- c. 6
- d. 10

Short Answer: SHOW ALL WORK FOR FULL MARKS.

1. Solve for x . Round to 2 decimal places.

(2)

$$\frac{80}{46.5} = \frac{x}{67}$$

2. Solve for x . Round to 2 decimal places.

(2)

$$\frac{130}{50} = \frac{24}{x}$$

3. You can buy chicken from the grocery store for \$7.60/kg. You need 1.6 kg of chicken. How much will it cost?

(2)

4. Sarah has a summer job painting portraits of people's houses. She charges \$150.00/painting. If Sarah can finish 4 paintings per month, how much money will she earn on her 2-month summer vacation?

(1)

5. Solve for c when d equals 8.5.

$$c = 1.5d + 3.5$$

6. Solve for x when y equals 236. (3)
 $y = 15x + 41$

7. Solve for y when x equals 40.9. Round to 2 decimal places. (1)
 $y = \frac{3}{4}x$

8. Solve for s when g equals 32. Round to 2 decimal places. (2)
 $s = \frac{3}{5}(g - 13)$

9. Solve for x . (Hint: BEDMAS) (1)
 $x = 44 + 51 - 29 \times 18$

10. Solve for y . (Hint: BEDMAS) (1)
 $4 + 7 \times 3 - 3$

11. Solve for i . (Hint: BEDMAS) (1)
 $i = 10 + 17 \times \frac{12}{4} - 7$

12. What does it mean for two lines to be parallel? (1)

13. What does it mean for two lines to be perpendicular? (1)

14. Convert the following fractions to decimals. (2)

a) $\frac{2}{10}$

b) $\frac{16}{82}$

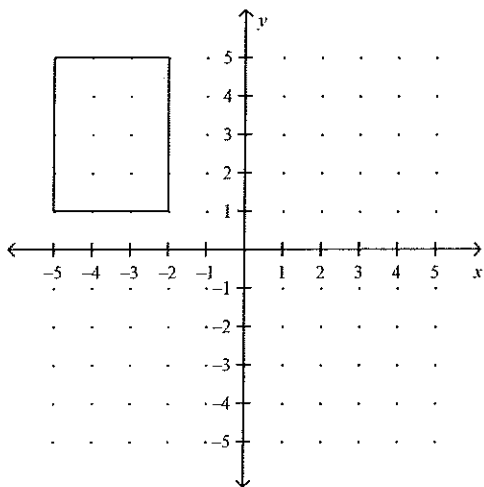
c) $\frac{30}{11}$

d) $\frac{20}{16}$

15. What is a right angle? (1)

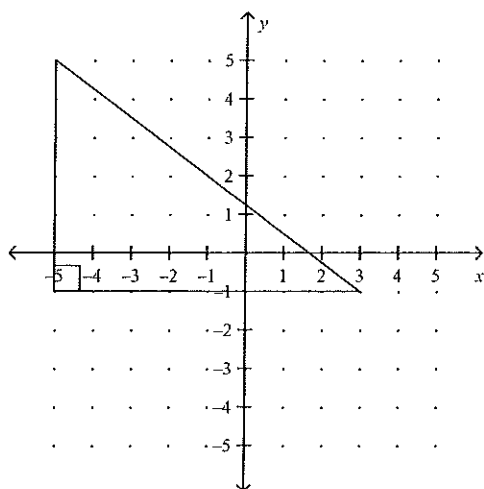
16. If you add the three angles in a triangle, they will add to ____ degrees. (1)

17. Draw a rectangle that is similar to the one below by doubling each of the side lengths. (2)



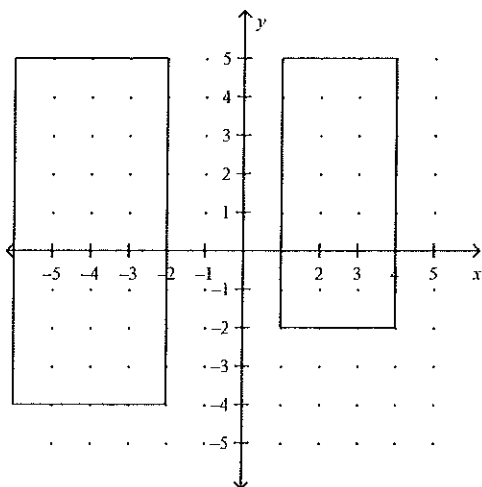
18. Draw a triangle that is similar to the one below by halving each of the side lengths.

(2)



19. Are the two rectangles below similar? yes or no. Explain using words or math.

(2)



20. Round 178.17 to 1 decimal place.

(1)

21. Round 13.641 to 2 decimal place.

(1)

22. Round 1285.2 to the nearest whole number.

(1)

23. Round 145.2 to the nearest tens.

(1)

24. Solve for x . Round to 1 decimal place.

$$x^2 + 0.4^2 = 1.8^2$$

(2)