Practice Test 2 GED Math

1. At GHS, the ratio of students to teachers is about 14.5 to 1. Approximately how many teachers would there be if the school had an enrollment of 205 students?

a. 8

b. 16

c. 14

d. 11

2. Coach Louis has 5 red shirts, 4 yellow shirts, 2 black shirts and 1 blue shirt. If he selects a shirt blindfolded, what is the probability that it will be a black shirt?

a. 1/3

b. 1/12

c. 1/4

d. 1/6

3. Joshua has $632.58 in his bank account. After he wrote a check, he had $379.12 left in his account. Which equation could be used to figure out the amount of the check written?

a. $632.58 + c = $379.12

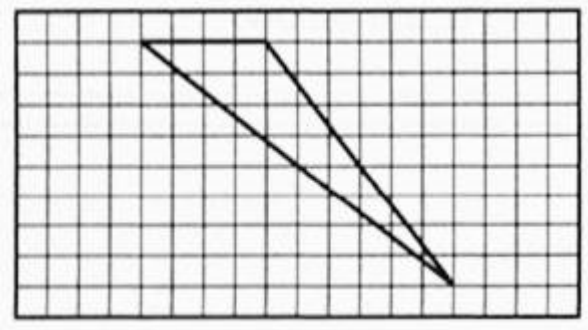
b. $632.58 + 3c = $379.12

c. $632.58 - c = $379.12

d. $379.12 + c = 632.58

4. What is the range in the given set of numbers? $\{3, 12, 8, 27, 16, 34\}$

5. What is the area in square graph units, of the triangle?



a. 32

b. 56

c. 10

d. 16

6. The number 28.5 is 300 times greater than which number?

a. 0. 801

b. 0.095

c. 0.0095

d. 0.0475

7. A plane flies 800 miles in 2.5 hours. What is the average speed in miles per hour?

a. 320

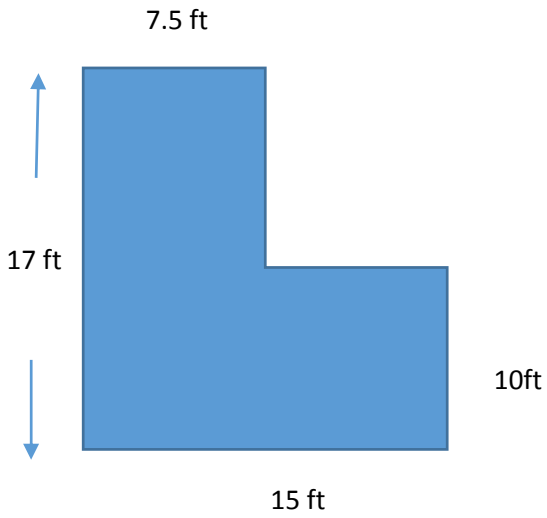
b. 470

c. 280

d. 340

How much carpet is needed to cover the area of this office space?

8.



a. 127.5

b. 202.5

c. 52.5

d. 277.5

e. none of these

9. Nataly spends $40 per month for a bus pass. If she bought a car, she estimates about $95 per month on a car payment, $20 per month for parking, $70 per month for gas and maintenance, and $60 for car insurance. How much does she save per month by taking the bus?

a. $205

b. $285

c. $274

d. $169

10. Factor the expression $15x^2 + 9x$

11. Solve. x^2 - $3x$ = 4

12. If -8(y-10) = 160, what is the value of 3y

a. 25

b. -30

c. -7

d. 14

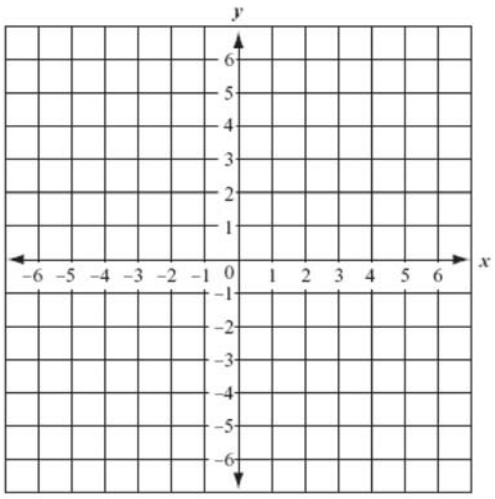
13. Bethany buys a used car for $9,000. She puts $600 down and finances the rest for 4 $\frac{1}{2}$ years at 5% annual interest. At the end of 4 $\frac{1}{2}$ years, the $9000 car will have cost her $ _____

14. In the quadratic equation x^2 + $2x$ – 8 = 0, what are the values of a, b, and c?

_____

15. Solve the equation $-3x^2$ - $5x$ + 2 = 4 using the quadratic formula. $\frac{-b \pm \sqrt{b^2-4ac}}{2a}$

16. A 3 X 4 rectangle *ABCD* is plotted on a coordinate plane with *A* at point (2, 0). What is a possible coordinate of point *D*?



a. (-2, 0)

b. (5, 0)

c. (-1, 0)

d. All of these

e. None of these

17. If $\frac{2x+6}{2} - x = \frac{x^2}{3}$, the value of x is

a. ± 3

b. ± 9

c. $\pm \sqrt{3}$

d. 0

18. Complete the table

400	620
320	
500	
	341
	1116
640	992

19. (**No calculator allowed**). If Jeremy purchased x t-shirts at $12 apiece, and y sweaters at $45 apiece, which expression represents the total value of the purchase?

a. $12x - 45y$

b. $12x + 45y$

c. $45x - 12y$

d. $45x + 12y$

20. (No **calculator allowed**). The fraction $\frac{6}{11}$ is $\left\{\begin{matrix} greater\ than \\ less\ than \\ equal\ to \end{matrix}\right\}$ $\frac{3}{5}$ _____

21. (**No calculator allowed**). Fill in the missing numbers in the following sequence by selecting from the choices below. (*Hint*: This is not an arithmetic sequence; these are numbers you should recognize.)

3		9	15		33		

5 17 21 23 29 34 45 49 53 59 64

22. The students in the incoming class of 1,450 students at a local college declared their majors from five choices, as shown in the table below.

Major	Percentage
Business	40 %
Education	14 %
Math	12 %
Science	10 %
Music	

a. The percent of students who declared Music is _____%.

b. The number of students who declared Business or Education is _____.

23. Simplify. - 4 $(x + 4x^2 + 6x)$.

a. $-28x - 16x^2$

b. $-4x - 16x^2 - 24x$

c. $-24x^2$

d. $28x + (-16x^2)$

e. None of these

24. The area of a rectangle is found by multiplying the length by the width. In the rectangle below, the area of the rectangle is equal to the expression $2x^2 - 27x + 70$.

W =?

L = (2x – 7)

An expression equal to the length is shown. Which of the following expressions is equal to the width of the rectangle?

a. x + 10

b. x – 10

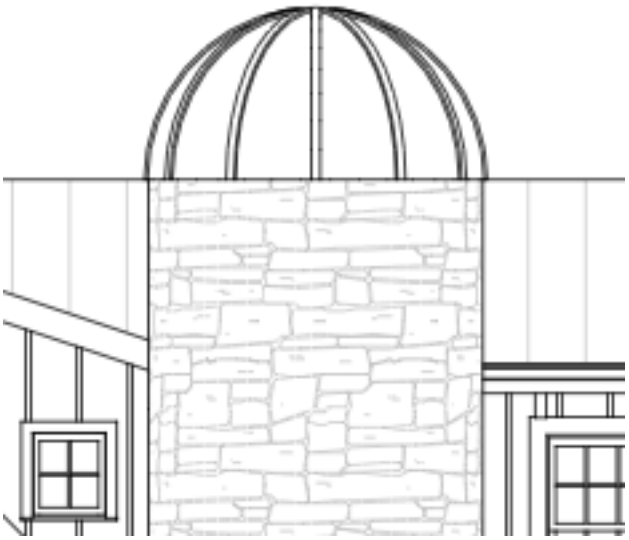
c. 2x + 10

d. 2x – 10

25. Subtract $4\frac{1}{16} - 1\frac{3}{8}$

26. A silo has a cylindrical storage area topped by half of a sphere. To figure out how much paint it will take to cover the whole silo, farmer Ted needs to know the surface area of the silo. He knows it is 40 feet high and has a radius of 20 feet. What is the surface area (in square feet in terms of π)?

$SA = (2 \times \pi \times r \times h) + (2 \times \pi \times r^2)$



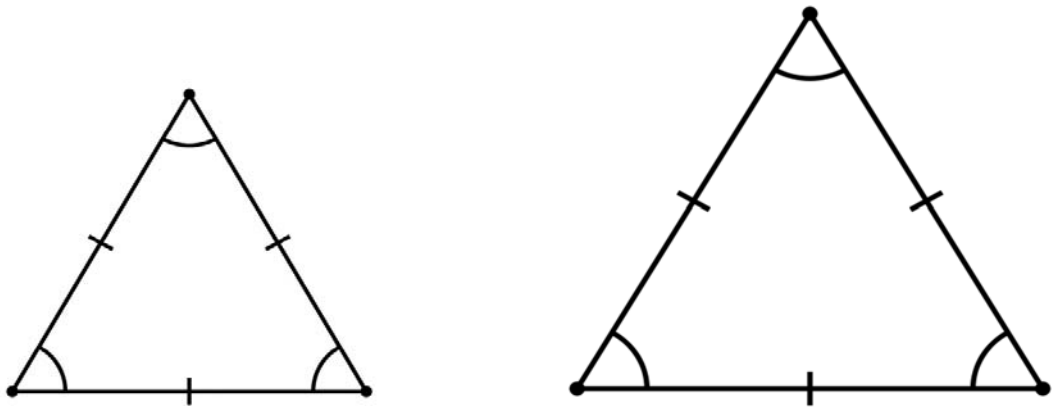
a. 800π

b. 1000π

c. 2400π

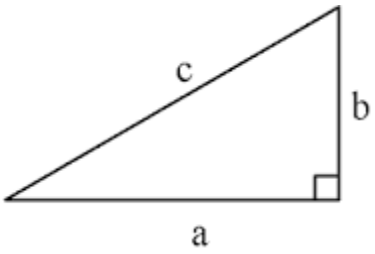
d. 600π

27. Two equilateral triangles are sitting side by side. The length of one side of Triangle A is 7ft. The sides of Triangle B are 2 times as long as those of Triangle A. How long is the length of one side of Triangle B? _____ ft.



28. The area of a right triangle is 35 square feet. What is the length of side *a* when side *b* is 5ft? _____ ft.

(Area of a triangle = $A\frac{1}{2}$ bh); a=base, b=height



29. Determine which quadrant each point would be plotted in. Then write the letter under the appropriate heading.

Quadrant I
Quadrant II
Quadrant III
Quadrant IV

a. negative x-coordinate and positive y-coordinate

b. (4, 2)

c. (-6, 2)

d. positive x-coordinate and negative y-coordinate

e. (-1, -3)

30. A photography studio enlarged a photograph that was 10 inches wide and 12 inches long to a similar photograph that was 36 inches long. How wide was the enlarged photograph? _____inches.

What scale factor did the photography studio use to enlarge the photograph? SF_____

Photograph 1

Photograph 2

31. The choices at a sandwich shop are shown below. Customers must select 1 bread type, 1 type of cheese, and 1 type of meat. How many possible combinations of bread, cheese and meat can the sandwich shop advertise?

Bread	Cheese	Meat
Wheat	American	Turkey
White	Swiss	Roast Beef
Honey Oat	Cheddar	Ham
Sour Dough	Provolone	Pastrami
Rye	Havarti	
	Pepper Jack	

a. 60

b. 93

c. 120

d. 74

e. none of these