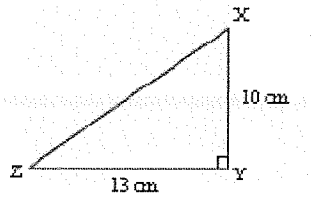
Name: _____ Class: _____ Date: _____ ID: A

3 C Mult Choice Review

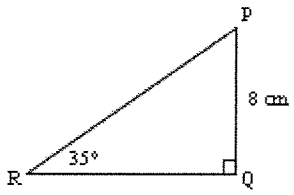
Multiple Choice
Identify the choice that best completes the statement or answers the question.

Use this diagram to answer the following questions.



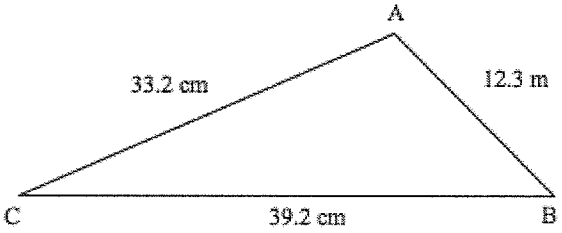
____ 1. In the above diagram, what is the measure of ∠Z?
a. 37.6° b. 39.7° c. 50.2° d. 52.4°

Use this diagram to answer the following questions.



____ 2. In the above diagram, what is the measure of side RQ?
a. 5.6 cm b. 9.8 cm c. 11.4 cm d. 13.9 cm

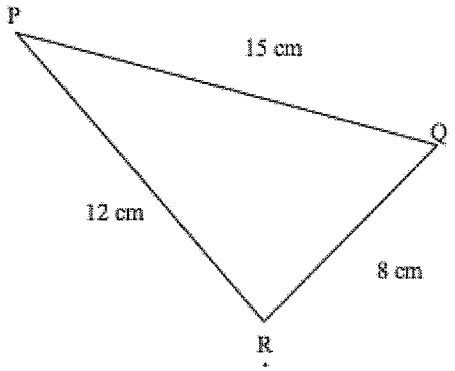
____ 3. Which of the following could be used to solve for ∠A?



a. sine law
b. cosine law
c. distance formula
d. Pythagorean theorem

Name: _____ ID: A

Use this diagram to answer the following questions.



____ 4. In the above diagram, what is the measure of $\angle Q$?
a. 52.8° c. 32.1°
b. 95.1° d. cannot be determined

____ 5. Probability is expressed as
a. a decimal c. a percent
b. a fraction d. any of the above

____ 6. In a probability experiment to simulate an event such as the gender of a baby, what you would use?
a. a six-sided die c. a spinner with 3 equal sectors
b. a coin d. none of the above

____ 7. The outcomes of a probability experiment can be organized in
a. a graph c. a tree diagram
b. a table d. any of the above

____ 8. Two coins are tossed simultaneously. What is the probability of tossing two heads?
a. 25% b. 50% c. 75% d. 100%

____ 9. A coin is tossed three times. What is the probability of tossing three heads in succession?
a. $\frac{1}{8}$ b. $\frac{3}{8}$ c. $\frac{1}{2}$ d. $\frac{7}{8}$

____ 10. Two six-sided dice are rolled. What is the probability of rolling a pair (both the same number)?
a. $\frac{1}{36}$ b. $\frac{5}{36}$ c. $\frac{1}{6}$ d. $\frac{1}{4}$

____ 11. Each of two identical spinners has five equal sectors that are numbered 1 to 8. If you spin both spinners, what is the probability of getting a total less than 12?
a. $\frac{5}{8}$ b. $\frac{10}{16}$ c. $\frac{6}{8}$ d. $\frac{49}{64}$

____ 12. In a board game, you can move any number of spaces up to and including the value you roll on a six-sided die. What is the probability that you win on your next roll, if you are 2 spaces short of the finish line?
a. $\frac{1}{6}$ b. $\frac{1}{3}$ c. $\frac{2}{3}$ d. $\frac{5}{6}$

____ 13. A school principal surveys only the boys in one class to determine if she should make recess longer. Which of the following is this an example?
a. biased sample c. unbiased sample
b. biased population d. unbiased population

____ 14. A pollster wants to find out if citizens are satisfied with the city council. Which procedure would be most appropriate for obtaining a statistically unbiased sample?
a. interviewing people at a popular local shopping centre
b. surveying people whose names have been randomly chosen from the telephone book
c. placing an advertisement in the local newspaper asking for mail-in responses
d. mailing a questionnaire to people whose names have been chosen randomly from a list of customers of the municipal utility company

____ 15. Which method is most likely to produce a random sample of the members of your class?
a. listing the first six students that come to mind
b. choosing the five oldest students in the class
c. writing the name of each student on a separate piece of paper and then drawing these slips from a hat
d. selecting the first six students to arrive at class

____ 16. Which type of graph best shows how a typical grade 11 student spends his or her allowance?
a. bar graph b. circle graph c. histogram d. pictograph

____ 17. Mike has taken four tests. His scores are 77%, 67%, 77%, and 97%. Mike has the choice of taking any measure of central tendency as his overall grade. Which of these measures should he take?
a. mean b. median c. mode d. does not matter

____ 18. Which of the following describes the normal distribution?
a. bimodal b. skewed c. asymmetrical d. unimodal

____ 19. The graph of the quadratic equation $y = x^2 - 6x + 8$ is a parabola that has a
a. minimum value of $y = -1$.
b. maximum value of $y = -1$.
c. minimum value of $y = 1$.
d. maximum value of $y = 1$.

____ 20. The graph of the quadratic equation $y = x^2 + 6x + 8$ is a parabola that has a
a. minimum value of $y = -1$.
b. maximum value of $y = -1$.
c. minimum value of $y = 0$.
d. maximum value of $y = 0$.

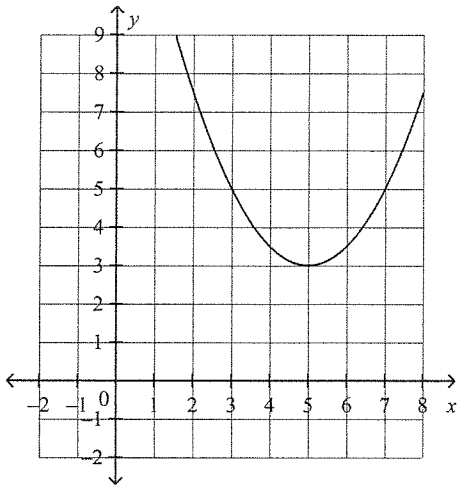
____ 21. Which quadratic relation would have this table of values?

x	y
–3	19
–2	8
–1	–1
0	–8
1	–13
2	–16
3	–17

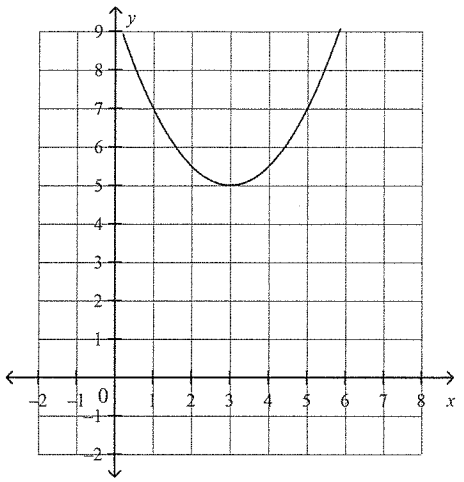
a. $y = x^2 + 6x + 8$
b. $y = x^2 - 6x - 8$
c. $y = x^2 + 6x - 8$
d. $y = x^2 - 6x + 8$

____ 22. Which graph represents the equation $y = -0.5(x-5)^2 + 3$?

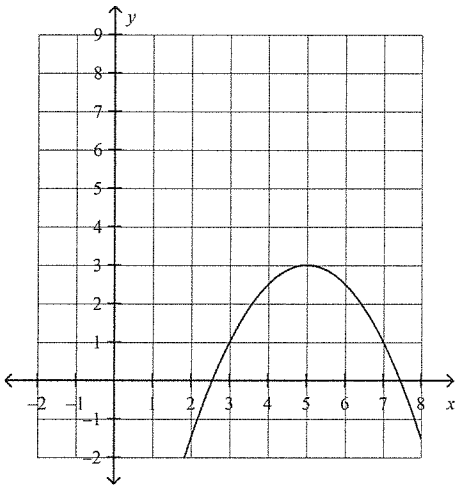
a.



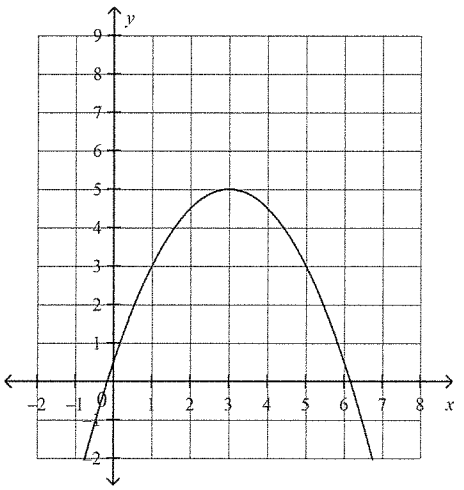
c.



b.



d.



____ 23. Which equation is the standard form of the relation $y = 2(x-3)^2 + 4$?

a. $y = 2x^2 - 12x + 18$
c. $y = x^2 - 6x + 11$
b. $y = 2x^2 - 12x + 22$
d. $y = x^2 - 6x + 9$

____ 24. If you arrange the trinomial $3 + 4x^2 - 8x$ in the form $ax^2 + bx + c$, what are its factors?

a. $(4x + 3)(x + 1)$
c. $(2x - 1)(2x - 3)$
b. $(4x + 1)(x - 3)$
d. $(2x + 3)(2x + 1)$

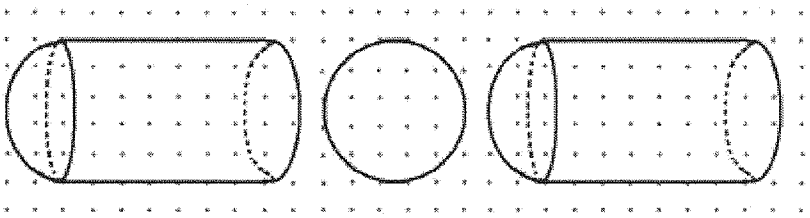
____ 25. Consider the quadratic relation $4x^2 + 20x - 56$. What are the zeros of this quadratic relation?

a. $x = 2$ and $x = 7$
c. $x = -2$ and $x = -7$
b. $x = 2$ and $x = -7$
d. $x = -2$ and $x = 7$

____ 26. A regular polygon can be used to tile a plane. Which would be the measure of its angles?

a. 50°
b. 60°
c. 75°
d. 105°

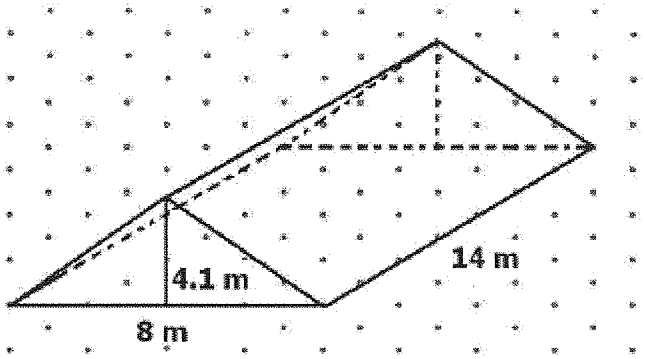
Use this diagram to answer the following questions.



____ 27. In the above diagram, the distance between pairs of horizontal or vertical dots is 0.5 m. Assuming that both ends of the propane tank have the same bulge in them, what is the overall length of the tank?

a. 2.5 m b. 3.5 m c. 4.5 m d. 5.5 m

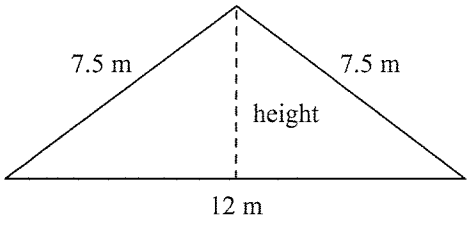
Use this diagram to answer the following question.



____ 28. In the above diagram, what is the length of the slope of the roof?

a. 4 m b. 5.7 m c. 8 m d. 9.2 m

____ 29. You want to build the face at each end of this roof out of plywood costing \$7/m^2. Assuming that no material will be wasted, how much will it cost to build these two faces for the roof?



a. \$ 94.50 b. \$189.00 c. \$283.50 d. \$378.00

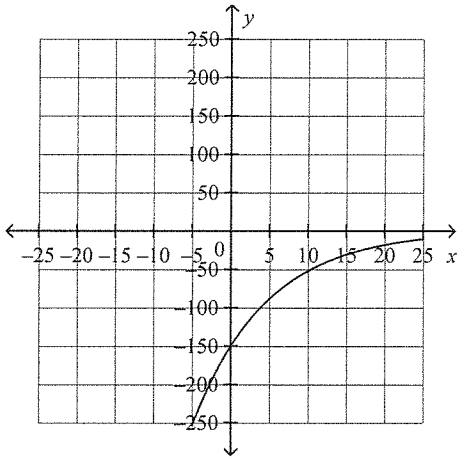
____ 30. Simplify $\left(\frac{3}{32}\right) \times \left(\frac{2}{3^{-3}}\right)$.

a. $\left(\frac{2}{3}\right)^4$ b. $\frac{1}{16}$ c. $\left(\frac{3}{2}\right)^4$ d. 16

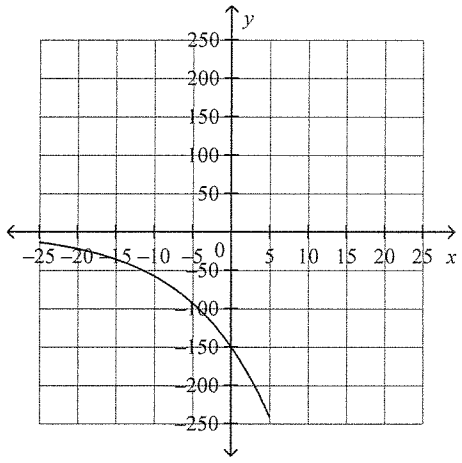
____ 31. Which graph corresponds to this table of values?

x	*y*
0	150
1	165
2	182
3	200
4	220
5	242
6	266
7	292
8	322
9	354
10	389

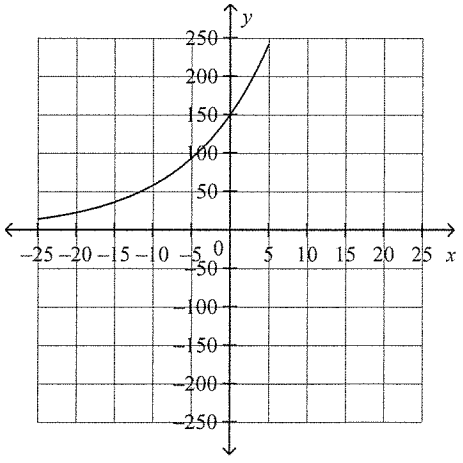
a.



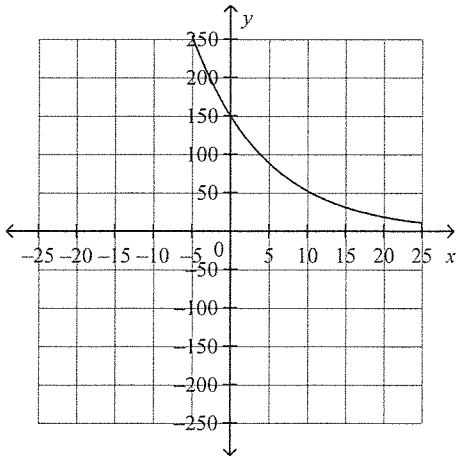
c.



b.



d.



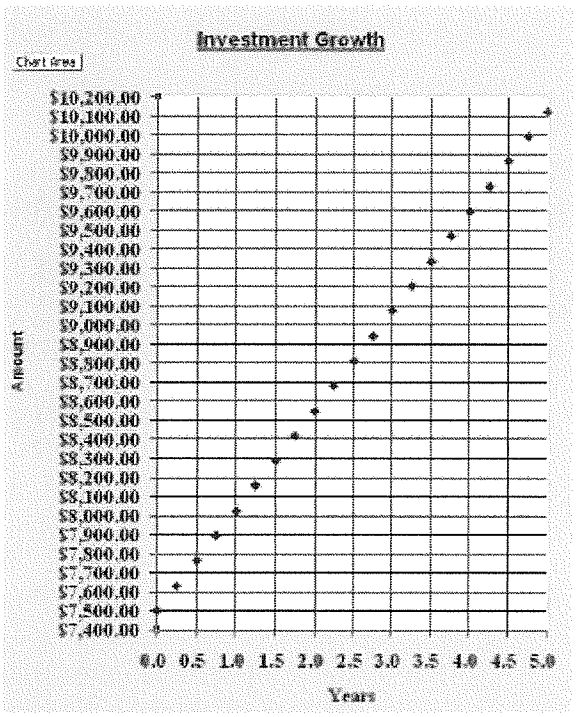
____ 32. Which statement is true about the graph of the exponential relationship $y = 120(3)^x$?
a. The graph starts at the origin.
b. The maximum value is 120.
c. There is no x-intercept.
d. The graph decreases from left to right.

Use this information to answer the following questions.

There are approximately 500 wolves in Algonquin Provincial Park. Under ideal conditions, this population would double every 35 years.

____ 33. Based on the above information, how many wolves were in the park 10 years ago?
a. 44 b. 320 c. 357 d. 410

____ 34. This graph shows the growth of an investment.



How much interest is earned at the end of four years?
a. $2100 b. $7500 c. $8400 d. $9600

____ 35. If the balance on a credit card is paid within the grace period, then
a. no interest will be charged.
b. only the minimum service interest will be charged.
c. interest will be charged only for the time between when the statement is sent out and payment is received.
d. interest will be charged from the date of purchase until payment is received.

____ 36. Once you purchase a vehicle, the following expenses are likely to be incurred:
a. insurance, maintenance, and fuel
b. insurance, fuel, and repairs
c. insurance, fuel, and loan payments
d. all of the above

Exam Review Mult Choice Answers

1. A
2. C
3. B
4. A
5. D
6. B
7. D
8. A
9. A
10. C
11. D
12. D
13. A
14. B
15. C
16. B
17. A
18. D
19. A
20. A
21. B
22. B
23. B
24. C
25. B
26. B
27. D
28. B
29. D
30. C
31. B
32. C
33. D
34. A
35. A
36. D