CALVERT EDUCATION

Algebra Placement Test

Please Fill This Form in Completely

_____
Name of child

_____ _____
Boy/Girl Age

_____ /_____ /_____
Month Day Year of birth

_____
Street address

_____ /_____ /_____
City State Zip/Postal Code

Was an 8th Grade math course completed?

❑ yes ❑ no

_____
Name of parent/guardian

(_____) _____ - _____
Daytime phone

_____
Email address

Answer each question in the space provided.
Please show all work.

Answers

1) Name as a fraction in simplest form.

a) 45% 1a)_____

b) .125 1b)_____

c) .666 1c)_____

2) Divide: .01 ÷ .025 = 2)_____

3) Multiply: 2.05 × .032 = 3)_____

4) 5.12 is what percent of 16? 4)_____

SUBMITTING THE TEST: Mail or e-mail the completed test using the directions below.

MAIL: Calvert Education Services • 10713 Gilroy Road, Suite B • Hunt Valley, MD 21031

E-MAIL: Please scan the test and questionnaire pages as a single PDF file. Be sure that the writing is clear and dark enough to produce a clearly scanned document. Attach this to your e-mail and type "Calvert Placement Test" in the subject line of the message. Send your e-mail to placement@calvertservices.org.

IMPORTANT: DO NOT FAX THE TEST.

Remember to show your work!

5) 45% of what number is 144? 5)_____

6) What is 15% of 25? 6)_____

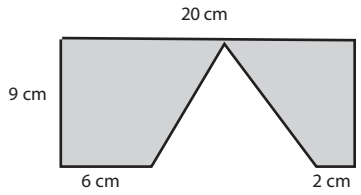
7) Find the rate a car travels if it goes 105 miles in 2 hours and 30 minutes. 7)_____

8) If 5 lb of cheese cost $18.50, how much would 1 lb cost? 8)_____

9) A pair of shoes regularly costing $42.00 is discounted 20%. What is the sale price? 9)_____

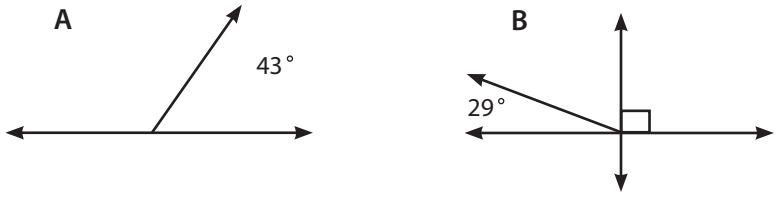
10) A box has a volume of 48 cubic feet. If the base of the box is 6 feet by 4 feet, what is its height? 10)_____

11) Find the area of the shaded region. 11)_____



Remember to show your work!

12) Find the measure of angles A and B without measuring. 12A)_____



12B)_____

13) Jane is twice as old as Jim. If Jim is k years old now, how old will Jane be in three years? Give an algebraic expression for Jane's age. 13)_____

14) When three is subtracted from twice a number n, the result is 17. Find the value of n. 14) n = _____

15) Solve for n.

a) $(-3) + n = 17$ 15a) n = _____

b) $2n - 1 = 11$ 15b) n = _____

c) $\frac{n}{3} + 1 = 4$ 15c) n = _____

16) Solve: $6 + 3^2 \times 2 \div 6 =$ ____ 16)_____

17) True or False? If $x < 7$, then $-x < -7$. 17)_____

18) Write as an algebraic expression: 18)_____

Seven less than three times a number ***n***.

Remember to show your work!

19) Add: $3\frac{2}{5} + 2\frac{3}{4} =$ 19)_____

20) Compute: $7\frac{1}{2} \times \frac{8}{15} \div 1\frac{1}{3}$ 20)_____

21) Rename as a fraction in **simplest form**: $18\frac{3}{4}\%$ 21)_____

22) Subtract: $3\frac{5}{8} - 1\frac{4}{5} =$ 22)_____

23) Find the mean, median, and mode for the following set of data:

10, 19, 25, 9, 10, 15, 3

23) Mean:_____

Median:_____

Mode:_____

24) Perform the indicated operations:

a) (-43) + (-17) 24a)_____

b) (-3) (-2) (-5) 24b)_____

c) 64 – (-18) 24c)_____

d) (-17) + (52) 24d)_____

e) (-40) ÷ 8 24e)_____

f) $(-1)^9$ 24f)_____

g) (-2) (6) – (-7) (-5) 24g)_____

Remember to show your work!

25) Solve the following proportion for n: $\frac{112}{63} = \frac{n}{18}$ 25) _____

26) A road map uses a scale of 1 in. = 48 mi. Find the actual distance.

a) 7 in. 26a)_____

b) $1\frac{7}{8}$ in. 26b)_____

27) Write the prime factorization of 360 in exponential form. 27)_____

28) Between which two **consecutive** whole numbers is $\sqrt{300}$? 28)_____

29) Compute and write your answer in scientific notation. 29)_____

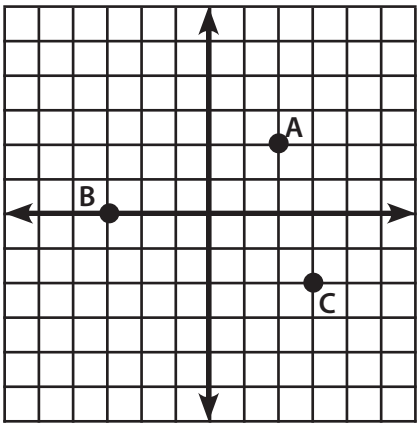
$(2.4 \times 10^{7}) \times (4 \times 10^{-12})$

30) Write the **ordered pairs** you get when you use these x-coordinates to solve the equation: -5, 0, 4

Equation: $3x - y = 7$ 30)_____

Remember to show your work!

31) Name the points indicated on the coordinate system below using an ordered pair of numbers.



31A)_____

31B)_____

31C)_____

Comments

Comments and Additional Information

(If you require additional space, please continue on the back.)

Please add information that would help us evaluate this placement, if you wish.