

Equations Review Quiz
Topic:

Name:
Equations
Date:

Due Date:

Be sure to show all work and turn in your scratch work paper!!!

Everything on this review is a topic we have covered. Please put your best effort into it. Even though it is multiple choice, show your work or jot down notes on how you worked the problems. This way you know what you are doing wrong and when we start really reviewing for the SOL test you will have some examples to jog your memory and remind you that we really did do this once!!!! Good luck and do your best.

1) What is the solution to the equation $6 - \frac{2}{3}m = 5$?

- a) $m = 3$ b) $m = -3$ c) $m = \frac{3}{2}$ d) $-\frac{3}{2}$

2) Solve the equation $13 - 2x = -7$

- f) $x = -10$ g) $x = -3$ h) $x = 3$ j) $x = 10$

3) Tierra typically gets a 15% tip on the meals that she serves at her waitressing job. She receives a fixed salary of \$150 per week. If the customer's meals totaled \$850 last week, which equation could be used to determine her total earnings, t , for the week?

- a) $t = (0.15)(1.50 + 850)$ b) $t = 850 + 150(15)$
c) $t = 850(15) + 150$ d) $t = 850(0.15) + 150$

4) Solve for F: $C = \frac{5}{9}(F - 32)$

- f) $F = \frac{5}{9}C + 32$ g) $F = \frac{9}{5}C + 32$ h) $F = \frac{9}{5}C - 32$ j) $F = \frac{9}{5}(C - 32)$

5) Thomas has 4 tests each nine weeks. So far, he has obtained a 91, 76, and 93 on his three tests. What score does Thomas need in order to have 331 total points?

- a) 70 b) 71 c) 73 d) 84

6) Solve the equation: $\frac{3}{4}n = 12$.

f) $n = 4$

g) $n = 9$

h) $n = 16$

j) $n = 48$

7) Solve the equation: $3(x - 1) = 5$.

a) $x = 2$

b) $x = \frac{8}{3}$

c) $x = \frac{2}{3}$

d) $x = 8$

8) If the area of a rectangle equals 40 square feet and its length is 8 feet, what is the width?

f) 320 feet

g) 24 feet

h) 12 feet

j) 5 feet

9) Solve the following for h: $V = \frac{1}{3}\pi r^2 h$.

a) $\frac{3V}{\pi r^2}$

b) $\frac{V}{3\pi r^2}$

c) $\frac{3r^2}{V\pi}$

d) $3V\pi r^2$

10) Solve $5(1 - x) = 4(3 - x)$.

f) $x = -17$

g) $f = 17$

h) $x = -7$

j) $x = 7$

11) If the perimeter of an equilateral triangle is 36 feet, find the length of one side.

a) 6 ft

b) 9 ft

c) 12 ft

d) 72 ft

12) If the sales tax on taxable items in Virginia is 4.5%, which of the following would correctly represent the original cost if its final cost was \$2.61?

f) \$0.11

g) \$2.39

h) \$2.50

j) \$2.61

13) Solve the equation: $4n + 4 = 22 - 2n$

a) $n = 3$

b) $n = 4$

c) $n = 7$

d) $n = 13$