

How Am I Doing? Chapter 2 Test



MATH COACH

MyMathLab®

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After you take this test read through the Math Coach on pages 182–183. Math Coach videos are available via MyMathLab and YouTube. Step-by-step test solutions on the Chapter Test Prep Videos are also available via MyMathLab and YouTube. (Search “TobeyBeginningAlg” and click on “Channels.”)

Solve for the variable.

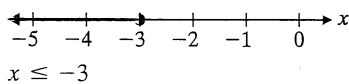
1. $3x + 5.6 = 11.6$
2. $9x - 8 = -6x - 3$
3. $2(2y - 3) = 4(2y + 2)$
4. $\frac{1}{7}y + 3 = \frac{1}{2}y$
5. $4(7 - 4x) = 3(6 - 2x)$
- MC 6. $0.8x + 0.18 - 0.4x = 0.3(x + 0.2)$
7. $\frac{2y}{3} + \frac{1}{5} - \frac{3y}{5} + \frac{1}{3} = 1$
8. $3 - 2y = 2(3y - 2) - 5y$
9. $5(20 - x) + 10x = 165$
10. $5(x + 40) - 6x = 9x$
11. $-2(2 - 3x) = 76 - 2x$
- MC 12. $20 - (2x + 6) = 5(2 - x) + 2x$

In questions 13–17, solve for x .

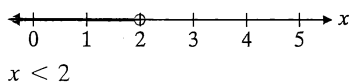
13. $2x - 3 = 12 - 6x + 3(2x + 3)$
14. $\frac{1}{3}x - \frac{3}{4}x = \frac{1}{12}$
15. $\frac{3}{5}x + \frac{7}{10} = \frac{1}{3}x + \frac{3}{2}$
16. $\frac{15x - 2}{28} = \frac{5x - 3}{7}$
- MC 17. $\frac{2}{3}(x + 8) + \frac{3}{5} = \frac{1}{5}(11 - 6x)$
18. Solve for w . $A = 3w + 2P$
19. Solve for w . $\frac{2w}{3} = 4 - \frac{1}{2}(x + 6)$
20. Solve for a . $A = \frac{1}{2}h(a + b)$
21. Solve for y . $5ax(2 - y) = 3axy + 5$
22. Solve for B . $V = \frac{1}{3}Bh$
- ▲ 23. Use your result from question 22 to find the area of the base (B) of a pyramid if the volume (V) is 140 cubic inches and the height (h) is 14 inches.

Solve and graph the inequality.

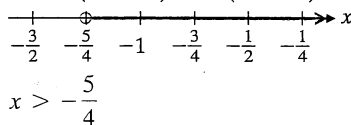
24. $3(x - 2) \geq 5x$



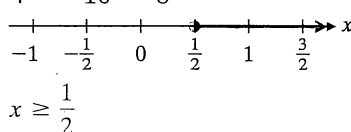
26. $5 + 8x - 4 < 2x + 13$



MC 25. $2 - 7(x + 1) - 5(x + 2) < 0$



27. $\frac{1}{4}x + \frac{1}{16} \leq \frac{1}{8}(7x - 2)$



1. $x = 2$
2. $x = \frac{1}{3}$
3. $y = -\frac{7}{2}$ or $-3\frac{1}{2}$ or -3.5
4. $y = 8.4$ or $8\frac{2}{5}$ or $\frac{42}{5}$
5. $1 = x$
6. $x = -\frac{6}{5}$ or -1.2
7. $y = 7$
8. $y = \frac{7}{3}$ or $2\frac{1}{3}$
9. $x = 13$
10. $20 = x$
11. $x = 10$
12. $x = -4$
13. $x = 12$
14. $x = -\frac{1}{5}$ or -0.2
15. $x = 3$
16. $x = 2$
17. $x = -2$
18. $w = \frac{A - 2P}{3}$
19. $w = \frac{6 - 3x}{4}$
20. $a = \frac{2A - hb}{h}$
21. $y = \frac{10ax - 5}{8ax}$
22. $B = \frac{3V}{h}$
23. $B = 30 \text{ in.}^2$
24. See graph.
25. See graph.
26. See graph.
27. See graph.

Total Correct: