

Review A**Evaluate each expression.**

1) $5 + 3|-15 + 3^2|$

2) $(5)\left(\frac{-2 - 6}{-1 - |-3|}\right)$

3) $(1 + 4)(-2 - 4 - (4) - 3)$

Evaluate each using the values given.

4) $(b)\left(c + \frac{3}{3}\right)$; use $b = -5$, and $c = 5$

5) $y^2 + x - x$; use $x = 5$, and $y = 6$

6) $(m + q)(-1 - p)$; use $m = 5$, $p = 2$, and $q = 5$

Solve each equation.

7) $5(-5n + 8) - 7n = -24$

8) $2(3m - 7) = 16$

9) $-3(v + 8) - 2 = -34 - 7v$

10) $6(-5a + 2) + 8 = 20 - 2a$

11) $-2(x + 8) = 9 + 3x$

12) $-2(4x + 3) + 4x = -6(x - 1)$

13) $4(1 + 4x) + x = 2(2 + 6x) + 5x$

14) $-3(3 - 3p) - 4(4p - 7) = -7 - 7p$

15) $-\frac{9}{4}x + \frac{11}{4} - 2\frac{1}{3} = -\frac{103}{12}$

16) $\frac{1}{2}n + \frac{3}{2} + 1\frac{3}{4} = \frac{17}{4}$

17) $-2\left(\frac{1}{2}p + \frac{3}{2}\right) = -5$

18) $\frac{1}{2}\left(-2k - \frac{3}{2}\right) = \frac{19}{12}$

19) $|4 - 10n| + 4 = 88$

20) $-4|4x - 2| = -72$

21) $-6 + |4m + 1| = 15$

22) $|x + 4| = |2x - 5|$

23) Three consecutive integers add to 165. Find the integers.

24) The second angle of a triangle is three times the first. The third angle is 80 degrees larger than the first. Find the three angles.

25) Nicole is 26 years old. Emma is 2 years old. In how many years will Nicole be triple Emma's age?

26) Ann is eighteen years older than her son. One year ago, she was three times as old as her son. How old are they now?

Simplify each expression.

27) $9(10n + 1) - 2(10n - 3)$

28) $3(1 + 9a) - 6(7a + 10)$

29) $5(6 + 8k) + 10(k - 5)$

30) $7(1 - 10p) + 9(p - 2)$

Solve each equation for b

31) $\frac{1}{a}(2b + c) = d$

32) $\frac{4}{b} + \frac{c}{b} = a$

Answers to Review A

1) 23

5) 36

9) $\{-2\}$

13) { All real numbers. }

17) $\{2\}$

21) $\left\{5, -\frac{11}{2}\right\}$

25) 10

29) $-20 + 50k$

2) 10

6) -30

10) $\{0\}$

14) No solution.

18) $\left\{-\frac{7}{3}\right\}$

22) $9, \frac{1}{3}$

26) 10, 28

30) $-11 - 61p$

3) 30

7) $\{2\}$

11) $\{-5\}$

15) $\{4\}$

19) $\left\{-8, \frac{44}{5}\right\}$

23) 53, 55, 57

27) $70n + 15$

31) $\frac{ad - c}{2}$

4) -30

8) $\{5\}$

12) $\{6\}$

16) $\{2\}$

20) $\{5, -4\}$

24) 20, 60, 100

28) $-57 - 15a$

32) $\frac{4 + c}{a}$