Name Skill #11

P62

Find each answer.

1. 62% of 90 is 55.8

2. 40% of 120 is 48

3. 100% of 84 is 84

4. 15% of 34 is 5.1

5. $63\frac{1}{2}$% of 55 is 34.925

6. 300% of 40 is 120

7. 110% of 19 is 20.9

8. 65% of 9 is 5.85

9. $18\frac{1}{2}$% of 40 is 7.4

10. $15\frac{1}{4}$% of 20 is 3.05

11. 87% of 18 is 15.66

12. $55\frac{1}{3}$% of 24 is 13.28

13. What is 0.3% of 478? 1.434

14. What is $5\frac{1}{4}$% of 132? 6.93

15. 0.9% of 2,100 is what number? 18.9

Estimate each answer.

16. 33% of 39 is about 13

17. $66\frac{2}{3}$% of 48 is about 32

18. 24% of 64 is about 16

19. 18% of 80 is about 14

Pg #57

Skill #11

Find 130% of 62.

130% of 62 = n

(130% = 1.3)

$1.3 \times 62 = n$ Write an equation.

$80.6 = n$

Equivalents
$12.5\% = \frac{1}{8}$
$16\frac{2}{3}\% = \frac{1}{6}$
$33\frac{1}{3}\% = \frac{1}{3}$
$37.5\% = \frac{3}{8}$
$50\% = \frac{1}{2}$
$66\frac{2}{3}\% = \frac{2}{3}$
$75\% = \frac{3}{4}$

Find $33\frac{1}{3}\%$ of 57.

$33\frac{1}{3}\%$ of 57 = n

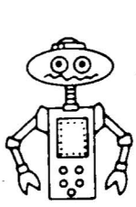
($33\frac{1}{3}\% = \frac{1}{3}$)

$\frac{1}{3} \times 57 = n$ Write an equation.

$19 = n$

Find each answer.

1. 50% of 80 — 40
2. 35% of 60 — 21
3. 200% of 16 — 32
4. 425% of 50 — 212.5
5. $33\frac{1}{3}\%$ of 24 — 8
6. 12.5% of 56 — 7
7. $16\frac{2}{3}\%$ of 96 — 16
8. $66\frac{2}{3}\%$ of 45 — 30
9. 126% of 72 — 90.72
10. 37.5% of 88 — 33



Cross off your answers. They are all here.

~~7~~	~~90.72~~	~~40~~	~~33~~	~~16~~
~~32~~	~~8~~	~~212.5~~	~~21~~	~~30~~

Find each percent.

1. 18 is what percent of 30? 60%

2. 14 is what percent of 35? 40%

3. 8 is what percent of 20? 40%

4. 32 is what percent of 50? 64%

5. 23 is what percent of 10? 230%

6. 9 is what percent of 5? 180%

7. What percent of 115 is 322? 280%

8. What percent of 450 is 18? 4%

9. What percent of 30 is 12? 40%

10. What percent of 118 is 531? 450%

11. What percent of 240 is 48? 20%

12. What percent of 44 is 11? 25%

13. 10.9 is what percent of 43.6? 25%

14. 83.2 is what percent of 320? 25%

15. What percent of 55.6 is 65.9? 118.5%

16. What percent of 42 is 74.9? $178\frac{1}{3}\%$

Name Skill # 11

What percent of 30 is 21?

?% of 30 is 21 .

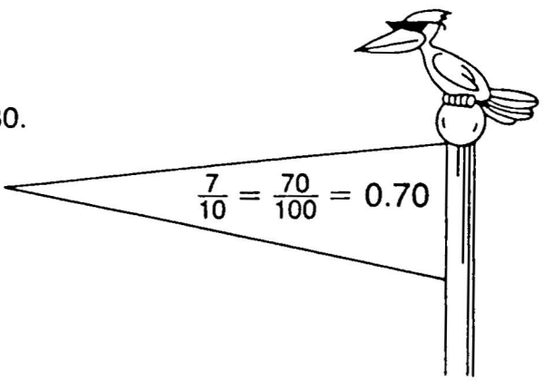
$n \times 30 = 21$ Write an equation.

$\frac{n \times 30}{30} = \frac{21}{30}$ Divide both sides by 30.

$n = \frac{21}{30}$

$n = \frac{7}{10} = 70\%$

21 is 70% of 30.



Write an equation for each sentence.

1. What percent of 50 is 10?

n % of 50 is 10.

n · 5 = 10

2. What percent of 72 is 60?

n % of 72 is 60.

n · 72 = 60

3. 8 is what percent of 200?

8 is n% of 200

8 = n · 200

4. 125 is what percent of 200?

125 is n% of 200.

125 = n · 200

Find each percent.

5. What percent of 80 is 28?

n % of 80 is 28.

n = 35%

6. What percent of 250 is 100?

n % of 250 is 100.

n = 40%

7. 12 is what percent of 24?

12 is n% of 24.

n = 50%

8. 3 is what percent of 30?

3 is n% of 30.

n = 10%

pg. #60

Use after pages 154–155.

Name Skill # 11

48% of what number is 60?

48% of ? is 60.

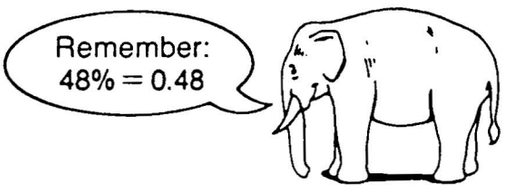
↓ ↓ ↓

0.48 × n = 60 Write an equation.

$\frac{0.48 \times n}{0.48} = \frac{60}{0.48}$ Divide both sides by 0.48.

$n = \frac{60}{0.48}$

$n = 125$



48% of 125 is 60.

Write an equation for each sentence.

1. 10% of what number is 40?

10% of n is 40.

$0.10 \cdot n = 40$

2. 5% of what number is 35?

5% of n is 35.

$0.05 \cdot n = 35$

3. 20% of what number is 1.6?

20% of n is 1.6.

$0.20 \cdot n = 1.6$

4. 45% of what number is 4.14?

45% of n is 4.14.

$0.45 \cdot n = 4.14$

Find each number.

5. 50% of what number is 18?

50% of n is 18.

$n = 36$

6. 4% of what number is 6?

4% of n is 6.

$n = 150$

7. 27 is 30% of what number?

27 is 30% of n.

$n = 90$

8. 10 is 20% of what number?

10 is 20% of n.

$n = 50$

Pg. #61

Name SKILL #10

Compare these integers. Use > or <.

1. $7 \bigcirc 9$ (<)
2. $4 \bigcirc 2$ (>)
3. $1 \bigcirc -3$ (>)
4. $-32 \bigcirc 2$ (<)
5. $0 \bigcirc -2$ (>)
6. $4 \bigcirc -13$ (>)
7. $-3 \bigcirc -5$ (>)
8. $0 \bigcirc 1$ (<)
9. $0 \bigcirc -1$ (>)
10. $-3 \bigcirc 0$ (<)
11. $14 \bigcirc -14$ (>)
12. $-36 \bigcirc -48$ (>)
13. $-4 \bigcirc -1$ (<)
14. $12 \bigcirc -14$ (>)
15. $-9 \bigcirc 6$ (<)
16. $22 \bigcirc 23$ (<)

List these integers in order from least to greatest.

17. 4 −4 2 — -4 2 4
18. 0 −3 6 — -3 0 6
19. −3 −6 0 — -6 -3 0
20. 0 −6 2 — -6 0 2
21. 17 −17 8 −3 — -17 -3 8 17
22. −23 0 18 −14 — -23 -14 0 18
23. −40 20 −9 5 — -14 -9 5 20

The table shows temperatures taken at different times on a winter day in a northern city.

Degrees Fahrenheit	
2:00 A.M.	−12
7:00 A.M.	−8
12:00 NOON	−3
5:00 P.M.	6

24. When did the highest temperatures occur, *morning* or *afternoon*?

Afternoon

Maintenance

Compare these integers. Use < or >.

1. 5 < 10 2. 3 > −2 3. −5 < 0 4. −2 > −3

5. 0 < 8 6. 1 > −5 7. −15 > −21 8. −82 < −2

List these integers in order from least to greatest.

9. 2 −2 7
−2 2 7

10. −5 −7 3
−7 −5 3

11. 0 −1 1
−1 0 1

12. 2 −8 −14
−14 −8 2

13. 5 7 2
2 5 7

14. −7 0 11
−7 0 11

15. −1 49 −371 −190 −5 0 126 −11
−371 −190 −11 −5 −1 0 49 126

16. −5 6 40 −7 −100 −30 0 270
−100 −30 −7 −5 0 6 40 270

17. Which is less, −38 or −42? −42

18. Which is more, 16 or 15? 16

19. Which is less, −24 or −14? −24

20. Which is more, −32 or −33? −32

Pg. #63

Name Skill #12

P120

Add. Circle your answer in the chart below. Keep working exercises until you have circled six in a row, horizontally, vertically, or diagonally.

1. $14 + (-20) =$ -6
2. $-7 + 9 =$ 2
3. $8 + (-3) =$ 5
4. $-9 + 9 =$ 0
5. $0 + (-8) =$ -8
6. $-15 + 8 =$ -7
7. $17 + (-7) =$ 10
8. $-12 + 8 =$ -4
9. $13 + (-7) =$ 6
10. $-9 + 22 =$ 13
11. $-9 + (-9) =$ -18
12. $16 + (-2) =$ 14
13. $-12 + (-2) =$ -14
14. $-32 + 27 =$ -5
15. $16 + (-32) =$ -16
16. $-10 + 28 + (-7) =$ 11
17. $-19 + 21 + 15 + (-5) =$ 12

5	15	−21	−18	−2	13
23	0	−17	7	−5	−20
8	−10	−8	−49	−11	2
−13	11	−9	−7	98	52
−16	14	−40	9	−6	−52
−4	−14	10	−62	6	12

Pg#64

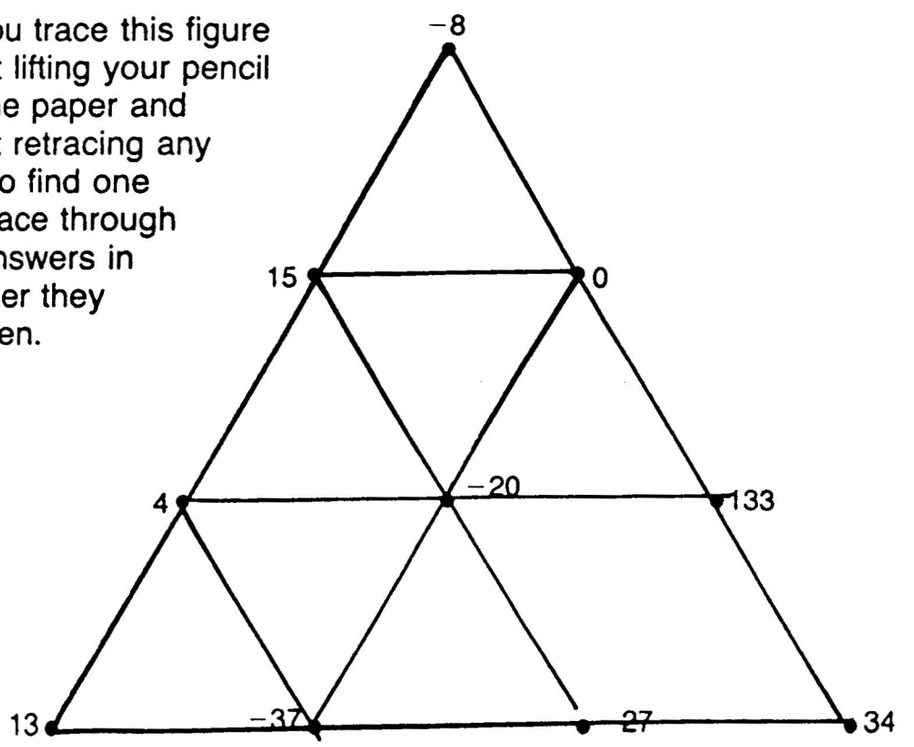
Name Skill #12

P121

Subtract.

1. $-4 - (4) =$ -8
2. $8 - (-7) =$ 15
3. $-9 - (-9) =$ 0
4. $-25 - (-5) =$ -20
5. $37 - 22 =$ 15
6. $-8 - (-12) =$ 4
7. $9 - (-4) =$ 13
8. $-17 - 20 =$ -37
9. $15 - 42 =$ -27
10. $24 - (-10) =$ 34
11. $67 - (-66) =$ 133
12. $-36 - (-9) =$ -27
13. $6 - 26 =$ -20
14. $-22 - 15 =$ -37
15. $-32 - (-36) =$ 4
16. $32 - 54 - (-2) =$ -20
17. $61 - (-50) + 22 =$ 133
18. $-4 - 8 - (-12) =$ 0
19. $-38 - 21 - (-51) =$ -8

Can you trace this figure without lifting your pencil from the paper and without retracing any line? To find one way, trace through your answers in the order they are given.



Pg#65

Name Skill #12 *Integers*

Adding & Subtracting Integers

Simplify each subtraction expression by "adding the Opposite" of the second number.

1. -8 + -9 -17
2. -10 – 4 -14
3. -15 + 20 5
4. 31 – (-8) 39
5. -17 + 9 -8
6. -9 – (-26) 17
7. -78 – 65 -143
8. 13 + -7 6
9. 113 – (-62) 175
10. 0 – (-9) 9
11. 34 + -68 -34
12. 608 – 343 265
13. -24 – (-38) 14
14. 0 – 17 -17
15. -56 – 45 -101
16. 73 + -18 55
17. -232 – (-232) 0
18. -108 + -676 -784
19. 43 + -56 – 78 -91
20. -98 – (-126) + 19 47
21. 91 – 176 – (-11) -74
22. -17 + 436 + -642 -223
23. -121 + -732 – (-13) -840
24. -534 – (-454) + -78 -158

Pg #66

Name Skill #12 *Integers*

Mixed Practice with Integers

Perform the indicated operations.

1. $-34 + -122$

   -156

2. $80 - (-22)$

   102

3. $-3 \cdot 5$

   -15

4. $19 \cdot -23$

   -437

5. $83 + -85$

   -2

6. $28 - (-65)$

   93

7. $28 - (-26)$

   54

8. $-31 - (-21)$

   -10

9. $-35 + 62 + -90$

   -63

10. $12 \cdot -13 \cdot 6$

    -936

11. $(212 + -234 - 222) \div -6$

    $40\frac{2}{3}$

12. $100 \cdot 3 \cdot 21$ $6,300$

13. $\frac{175}{-5} \cdot -4$

    140

14. $\frac{-555}{-5} \cdot -6$

    -666

15. $\frac{-424}{4}$

    -106

16. $\frac{-72}{8} + \frac{-64}{8} + \frac{33}{-11}$

    $-22\ \frac{2}{3}$

17. $(225 \div 5) \cdot .2$

    90

18. $(-19 - (-21) - (-34)) \div -6$

    -6

19. $(-18 - -77 - 22) \cdot 2$

    74

20. $(10 + -31 + -80) \div 3$

    $-33\ \frac{2}{3}$

21. $(16 - 21 + 34) \div -8$

    $-3\ \frac{5}{8}$

22. $(-320 + -75 + 24) \cdot 4$

    $-1,484$

23. $(-12 + 13 + 55) \cdot 3$

    168

24. $(-12 - 54 - 10) \cdot 2$ -152

Pg#67

Maintenance

Give each answer.

1. $-2(15) =$ -30
2. $-15 \div (-3) =$ 5
3. $15 - 35 =$ -20
4. $12(2) =$ 24
5. $0(-88) =$ 0
6. $9 \div (-3) =$ -3
7. $\frac{44}{4} =$ 11
8. $\frac{56}{-7} =$ -8
9. $0 - 89 =$ -89
10. $-72 \div 9 =$ -8
11. $5 - (-2) =$ 7
12. $\frac{125}{-5} =$ -25
13. $\frac{-48}{6} =$ -8
14. $0 - (-3) =$ 3
15. $5 - (-2) =$ 7
16. $38 - (5 + 2) =$ 31
17. $(2)(-5)(0)(56) =$ 0
18. $15 + (-7) - (-18) - 17 =$ 9
19. $14 - (-10) - 18 - (-2) =$ 8
20. $-3(4)(-2)(-1) =$ -24
21. $6 - (-7 + 6) =$ 7
22. $32 + (-32) - 32 =$ -32
23. $32 \div (-32) =$ -1
24. $27 - (-5) - 11 =$ 21
25. $(-3)(-12)(2) =$ 72

Pg. #68

Use after pages 332-333.

Name Skill #13 *Variables and Equations*

Combine Like Terms

$9x + 7y + -21x = -12x + 7y$

Combine like terms.

1. $5x + 7x = 12x$
2. $19x + x = 20x$
3. $k - (-8k) = 9k$
4. $-12x + -4x = -16x$
5. $13c - 12c = c$
6. $-e + 8e = 7e$
7. $3yz + 5yz = 8yz$
8. $-12n - -13n = n$
9. $12b + -34b = 22b$
10. $13ab + (-12ab) = ab$
11. $4.7x - 5.9x = -1.2x$
12. $7s + 5x - 8s = s + 5x$
13. $4a + 9 + a = 5a + 9$
14. $5x - 6y - 8y + 7x = 12x - 14y$
15. $23x + 8 + 6x + 3y = 29x + 3y + 8$
16. $4xy + 7xy + 6x^2y + 7xy^2 =$ $11xy + 6x^2y + 7xy^2$
17. $-21x + 7y + 6xy + -3y^2 =$ $4x - y + 3xy$
18. $4x + 3y + -5y + 3xy + y$ $4x - y + 3xy$
19. $2xy + 7x + 6xy + 3xy + -3x$ $11xy + 4x$
20. $4x^2 + -7y + -4xy + 9x^2 + 2xy$ $13x^2 - 7y - 2xy$

Pg# 69