# Chapter 1 Answers

## Practice 1-1

**1.** $7 + x$ **2.** $3p$ **3.** $10 - m$ **4.** $7 - n$
**5.** $2q$ **6.** $m + 3$ **7.** 8 divided by $a$ **8.** 10 less than $s$
**9.** 13 more than $x$ **10.** 2 more than the product of $a$ and $b$
**11.** $8 - n$ **12.** $4 + n$ **13.** $2n$ **14.** $3 + n$ **15.** $10 + \frac{15}{n}$
**16.** $n - 12$ **17.** $c = 24.95s$ **18.** $g = 30t$ **19.** $m = 0.10d$
**20.** $n = 48 - g$ **21.** $c = 8p$ **22.** $c = 32.95p$
**23.** $c = 3.50t$ **24.** $d = 55h$ **25.** $p = 5h$ **26.** $a = 10 - c$
**27.** $l = 0.45d$ **28.** $r = 500 - t$

## Practice 1-2

**1.** 52 **2.** 2 **3.** 38 **4.** 4 **5.** 18.9 **6.** 87 **7.** 25 **8.** 7 **9.** 2
**10.** 1 **11.** 9 **12.** 30.4 **13.** 19 **14.** 5 **15.** 2 **16.** 6 **17.** 26
**18.** 29 **19.** 31 **20.** 88 **21.** 14.18 **22.** 85 **23.** 28 **24.** 12
**25.** 26 **26.** 5 **27.** 55 **28.** 56 **29.** 72 **30.** 60 **31.** 40 **32.** 2
**33.** 11 **34.** 4 **35.** 131 **36.** 141 **37.** 33 **38.** 16 **39.** 22
**40.** 12 **41.** 2 **42.** 1 **43.** 56 **44.** \$33.95 **45.** \$63.34 **46.** 24
**47.** 2.25 **48.** 0 **49.** 99 **50.** 5 **51.** 6

## Practice 1-3

**1.** rational, real **2.** rational, real **3.** natural, whole, integers, rational, real **4.** irrational, real **5.** irrational, real
**6.** integers, rational, real **7.** rational, real **8.** natural, whole, integers, rational, real **9.** true **10.** false; $-2$ **11.** true
**12.** false; $7 \times 2 = 14$ **13.** $>$ **14.** $<$ **15.** $<$ **16.** $=$ **17.** $>$
**18.** $<$ **19.** $-\frac{8}{9}, -\frac{22}{25}, -\frac{7}{8}$ **20.** $-3\frac{12}{25}, -3.45, -3\frac{4}{9}$
**21.** $-\frac{1}{3}, -\frac{1}{4}, -\frac{1}{5}$ **22.** $-1\frac{7}{9}, -1\frac{3}{4}, -1.7$ **23.** $-\frac{7}{8}, -\frac{3}{4}, -\frac{2}{3}$
**24.** $2\frac{5}{8}, 2.7, 2\frac{3}{4}$ **25.** whole **26.** rational **27.** whole
**28.** irrational **29.** $\frac{3}{10}$ **30.** 327 **31.** 3.46 **32.** $\frac{1}{2}$
**33.** \$154.23, 0.0375, $\frac{30}{365}$, \$.48, 0.055, and $3\frac{1}{2}$ are rational and real; \$8000 and \$1540 are whole, integers, rational, and real.

## Practice 1-4

**1.** 2 **2.** $-15$ **3.** $-14$ **4.** $-17$ **5.** $-41$ **6.** 5 **7.** 19.7
**8.** $-16.2$ **9.** $-7.6$ **10.** $-\frac{1}{2}$ **11.** $\frac{1}{3}$ **12.** $-\frac{5}{12}$ **13.** $1\frac{2}{3}$
**14.** $-2\frac{1}{4}$ **15.** $-2\frac{1}{3}$ **16.** 1.9 **17.** $-0.99$ **18.** 1.2 **19.** 33
**20.** 7 **21.** $-7$ **22.** $-0.9$ **23.** $-0.7$ **24.** $-5$ **25.** 5
**26.** $-18$ **27.** 1 **28.** $-6$ **29.** $\frac{5}{12}$ **30.** $-2\frac{1}{3}$
**31.** $\begin{bmatrix} 3 & 1 \\ 0 & 2 \end{bmatrix}$ **32.** $\begin{bmatrix} 0.4 \\ -0.4 \\ 1.1 \end{bmatrix}$
**33.** $-18$°F **34.** their own 11-yd line **35.** \$170.53 **36.** $-39$ ft

## Practice 1-5

**1.** 7 **2.** $-16$ **3.** $-12$ **4.** $-8$ **5.** 43 **6.** $-49$ **7.** $-21.4$
**8.** 14.6 **9.** $-9$ **10.** 26.4 **11.** 12 **12.** $-10.6$ **13.** $-\frac{1}{2}$
**14.** $-1$ **15.** $\frac{1}{2}$ **16.** $-18$ **17.** 12 **18.** $-5.9$ **19.** 24 **20.** 10.5
**21.** $-0.99$ **22.** 3 **23.** 9 **24.** $-3$ **25.** 9 **26.** $-3$ **27.** 3
**28.** 17 **29.** $-8$ **30.** $-19$ **31.** $-7$ **32.** $-7$ **33.** $-8$
**34.** $\begin{bmatrix} -8 & 1 \\ 5 & -4 \end{bmatrix}$ **35.** $\begin{bmatrix} -0.9 & -1.7 \\ -2.1 & -6.3 \end{bmatrix}$
**36.** 29°F **37.** 29,310 ft
**38.** $-$\$205.72 **39.** their own 35-yd line

## Practice 1-6

**1.** $-16$ **2.** 54 **3.** 81 **4.** $-32$ **5.** $-48$ **6.** 196 **7.** 48 **8.** 6
**9.** 4 **10.** 120 **11.** $-49$ **12.** $-243$ **13.** $-4$ **14.** $-2$ **15.** 15
**16.** $-125$ **17.** 4 **18.** 112 **19.** $-\frac{4}{5}$ **20.** $-32$ **21.** 49
**22.** $-200$ **23.** $-20$ **24.** 256 **25.** $-11$ **26.** 32 **27.** 0
**28.** $-4$ **29.** $-\frac{7}{4}$ **30.** 16 **31.** 2 **32.** 91 **33.** 64 **34.** $-120$
**35.** $-7$ **36.** 3 **37.** 64 **38.** $-15$ **39.** $-5$ **40.** $-15$ **41.** 4
**42.** 72 **43.** $-27$ **44.** $-1019$ **45.** $-15$ **46.** $-4$ **47.** 108
**48.** 256

## Practice 1-7

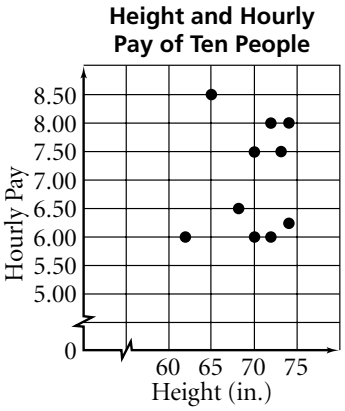
**1.** $2x + 12$ **2.** $-40 + 5b$ **3.** $-4x + 28$ **4.** $-15c + 21$
**5.** $-7.5a - 12.5$ **6.** $-3k + 12$ **7.** $-9 + 12d$ **8.** $4h - \frac{2}{3}$
**9.** $19.2x - 12.6$ **10.** $10.5x - 28$ **11.** $4x + 28$
**12.** $-5a + 10$ **13.** $8 - 10d$ **14.** $-2k + 22$ **15.** $-2h - 5$
**16.** $-8c + 32$ **17.** $-4 + 2b$ **18.** $6x - 18$ **19.** $8r + 32$
**20.** $-5b + 25$ **21.** $3f + 6$ **22.** $11h - 25$ **23.** $d - 21$
**24.** $1 + 8x$ **25.** $2h + 4$ **26.** $8 + 2y$ **27.** $-n - 2$
**28.** $3w + 12$ **29.** $1.2d - 2$ **30.** $-2d + 6$ **31.** $5x + 12$
**32.** $6a + 4$ **33.** $3t - 15$ **34.** $-b + 20$ **35.** $2k + 6$
**36.** $0.8s + 1.6$ **37.** $6b - 18$ **38.** $6n - 4$ **39.** $x - 2$
**40.** $2a + 7$ **41.** $9 + 10c$ **42.** $1 + \frac{2}{5}a$ **43.** $15x + 60$
**44.** $2m + 2$ **45.** $8a - 9$ **46.** $2x - 15$ **47.** $3t - 36$
**48.** $-18 - 6k$ **49.** $5(x + 6)$ **50.** $2(y - 8)$
**51.** $-15(x - 5)$ **52.** $\frac{32}{y + 12}$ **53.** $-8(4 - w)$
**54.** $(x + 9)(7 - x)$

## Practice 1-8

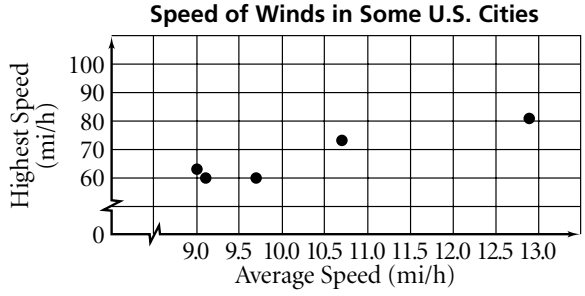
**1.** Comm. Prop. of Add. **2.** Comm. Prop. of Add.
**3.** Ident. Prop. of Mult. **4.** Distributive Prop.
**5.** Assoc. Prop. of Mult. **6.** Inverse Prop. of Mult.
**7.** Distributive Prop. **8.** Comm. Prop. of Add.
**9.** Assoc. Prop. of Add. **10.** Inverse Prop. of Add.
**11.** Comm. Prop. of Add. **12.** Assoc. Prop. of Mult.
**13.** Ident. Prop. of Add. **14.** Comm. Prop. of Add.
**15.** Distributive Prop. **16.** Mult. Prop. of Zero
**17.** Assoc. Prop. of Add. **18.** Comm. Prop. of Mult.
**19.** Comm. Prop. of Mult. **20.** Comm. Prop. of Add.
**21a.** Distributive Prop. **21b.** Comm. Prop. of Add.
**21c.** Assoc. Prop. of Add. **21d.** Distributive Prop.
**21e.** addition **22a.** Distributive Prop. **22b.** def. of subtr.
**22c.** Comm. Prop. of Add. **22d.** Distributive Prop.
**22e.** addition **22f.** def. of subtr. **23a.** Distributive Prop.
**23b.** Comm. Prop. of Add. **23c.** Distributive Prop.
**23d.** addition **24.** 80 **25.** 7200 **26.** 2400 **27.** 18
**28.** \$7 **29.** \$28 **30.** \$16

## Practice 1-9

**1.** $(-5, 4)$ **2.** $(6, 2)$ **3.** $(1, -3)$ **4.** $(-6, -5)$
**5.** II **6.** III **7.** I **8.** IV
**9.**




**10.**




**11.** no correlation **12.** positive correlation **13.** no correlation; a person's age is not related to the number of pets he/she may have. **14.** negative correlation; the more times you brush, the fewer the cavities you are likely to have. **15.** positive correlation; the more rainy days, the more umbrellas are likely to be sold. **16.** positive correlation
**17.** negative correlation **18.** no correlation

## Reteaching 1-1

**1.** $n + 5$ **2.** $n - 8$ **3.** $\frac{n}{9}$ **4.** $5n - 3$ **5.** $12n = 84$
**6.** $n - 7 = 22$ **7.** $8x = 72$ **8.** $\frac{n}{3} = 18$

## Reteaching 1-2

**1.** Check students' work. **2.** Check students' work.
**3.** Check students' work. **4.** Check students' work.
**5.** $-3$ **6.** $-75$ **7.** 2 **8.** 28 **9.** 3 **10.** $-1$
**11.** $-20$ **12.** $-56$

## Reteaching 1-3

**1.** rational, real **2.** rational, real **3.** whole, integer, rational, real **4.** rational, real **5.** irrational, real **6.** integers, rational, real **7.** rational, real **8.** natural, whole, integers, rational, real **9.** natural, whole, integers, rational, real **10.** integers, rational, real **11.** rational, real **12.** irrational, real
**13.–18.** Check students' work.

## Reteaching 1-4

**1.** $-7$ **2.** 17 **3.** 3 **4.** $-10$ **5.** $-5$ **6.** $-3$ **7.** 2 **8.** $-1$
**9.** $-3.8$ **10.** 7.6 **11.** $-2.3$ **12.** 21.2 **13.** 0.2 **14.** $-10.3$
**15.** $-20$ **16.** $-6.3$ **17.** $-1$ **18.** $-9$ **19.** 1 **20.** 9
**21.** 5.9 **22.** 0.9 **23.** $-0.9$ **24.** $-5.9$ **25.** 10.5 **26.** 3.7
**27.** $-3.7$ **28.** $-10.5$

## Reteaching 1-5

**1.** $-5$ **2.** $-3$ **3.** 9 **4.** 10 **5.** $-10$ **6.** $-9$ **7.** $-1$ **8.** 7
**9.** 2.3 **10.** 3.2 **11.** $-14.4$ **12.** $-7.3$ **13.** 6.2 **14.** $-1.6$
**15.** $-1.2$ **16.** $-13.7$ **17.** $-7$ **18.** 1 **19.** $-1$ **20.** 7 **21.** 13
**22.** $-3$ **23.** 7 **24.** $-5$ **25.** $\begin{bmatrix} -6 & -3 \\ -2 & -3 \end{bmatrix}$ **26.** $\begin{bmatrix} -\frac{1}{6} \\ 2 \end{bmatrix}$

## Reteaching 1-6

**1.–8.** Check students' work. **9.** $-8$ **10.** $-72$ **11.** 10
**12.** $-88$ **13.** 49 **14.** 50

## Reteaching 1-7

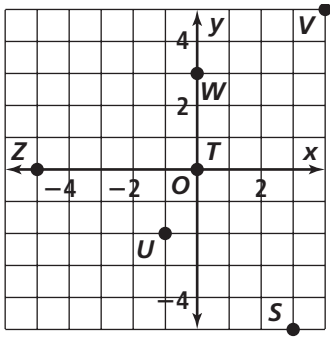
**1.** $10x + 8$ **2.** $3x - 2$ **3.** $28x - 12$ **4.** $20 + 10x$
**5.** $30 - 18x$ **6.** $3x - 5$ **7.** $6x - 12$ **8.** $21x + 28$
**9.** $8x + 8y$ **10.** $-4x - 3$ **11.** $2x - 1$ **12.** $6x + 3$
**13.** $-14x + 3$ **14.** $7x + 1$ **15.** $-3x - 4$

## Reteaching 1-8

**1.** Assoc. Prop. of Add. **2.** Distributive Prop.
**3.** Comm. Prop. of Mult. **4.** Assoc. Prop. of Mult.
**5.** Distributive Prop. **6.** Comm. Prop. of Add. **7.** 12 **8.** 8
**9.** 9; 9 **10.** 8 **11.** 6 **12.** 7; 7

## Reteaching 1-9

**1.** $(-8, 4)$ **2.** $(-4, 0)$ **3.** $(-2, 2)$ **4.** $(0, 3)$ **5.** $(2, 1)$
**6.** $(7, 4)$ **7.** $(8, -3)$ **8.** $(5, -6)$ **9.** $(-3, -5)$ **10.** $(-6, -8)$
**11.–16.**




## Enrichment 1-1

**1.** $O = 2I + 1$ **2.** $O = 3I - 1$ **3.** $O = I^2 - 1$
**4.** $S = 16T^2$ **5.** $R = \frac{3}{4}T + 7$ **6.** $P = 2^E + 1$
**7.** Check students' work.

## Enrichment 1-2

Answers may vary. Samples include:
**1.** $3 \times 2 \times 2$ **2.** $\sqrt{(8 + 8)}$ **3.** $2^3$ **4.** $(3 + 7) \times 4$
**5.** $(3 + 6) \div 3$ **6.** $30 \div 6 \times 5$ **7.** $(3 \times 9) - 2$ **8.** $4 + 3^2$
**9.** $(10 \div 2) + (3 \times 3)$ **10.** $\sqrt{25} \times 3 - 2 - 1$
**11.** $(5 + 3 - 4) \times 3$ **12.** $3 \times (8 - 2)$
**13.** $(4 \times 4) + (2 \times 4) - 6$

## Enrichment 1-3

Check students' work.

## Enrichment 1-4

Answers may vary. Samples include:
**1.** Check students' work. **2.** 6 black and 2 red or 4 black
**3.** 7 black and 1 red or 6 black **4.** 1 black and 5 red or 4 red
**5.** 2 black and 3 red or 1 red **6.** 12; 12 black **7.** −5; 5 red
**8.** −15; 15 red **9.** 11; 11 black **10.** 11; 11 black
**11.** 2; 2 black

## Enrichment 1-5

Check students' work.

## Enrichment 1-6

**1.** 720 **2.** 120 **3.** 17,280 **4.** 6 **5.** 20 **6.** 6 **7.** 120 **8.** 120
**9.** 625

## Enrichment 1-7

**1.** yes **2.** yes **3.** You always get the final answer of 2.
**4.** You always get 10 times your original number.
**5.** For Exercise 3:

$x$
$x + 5$
$4(x + 5) = 4x + 20$
$4x + 8$
$x + 2$
2

For Exercise 4:

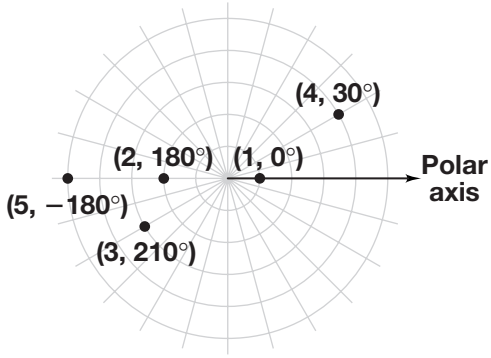
$x$
$10x$
$10x + 5$
$2(10x + 5) = 20x + 10$
$20x$
$10x$

## Enrichment 1-8

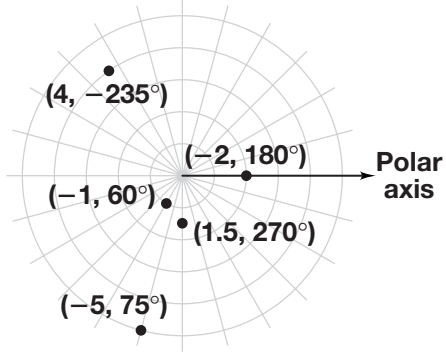
**1.** 4 **2.** 4 **3.** 2 **4.** 0 **5.** 5 **6.** 3 **7.** 6 **8.** 1
**9.** $1 \times 6 = 6 \times 1 = 6$; $1 \times 5 = 5 \times 1 = 5$;
$1 \times 4 = 4 \times 1 = 4$; $1 \times 3 = 3 \times 1 = 3$; and so on.
**10.** 1 and 1; 2 and 4; 3 and 5; 4 and 2; 5 and 3; 6 and 6; 0 has no multiplicative inverse. **11.** 3 **12.** 4 **13.** 0 **14.** 0 **15.** 0
**16.** 5 **17.** 4 **18.** 2 **19.** 4 **20.** 1

## Enrichment 1-9

**1.–5.**




**6.–10.**




## Chapter Project

**Activity 1: Researching**
Check students' work.

**Activity 2: Analyzing**
Check students' work.

**Activity 3: Organizing**
Check students' work.

**Activity 4: Calculating**
Check students' work.

## ✔ Checkpoint Quiz 1

**1.** $14 + x$; 18 **2.** $5z$; 7 **3.** $x + y$; 1 **4.** $\frac{24}{x}$; 6
**5.** $4z$; 5.6 **6.** $(y + z) + 10$; 8.4 **7.** $y + 2x$; 5 **8.** $xz$; 5.6
**9.** false; Answers may vary. Sample: The opposite of the opposite of $-2$ is $-2$ which is not a positive number.
**10.** false; Answers may vary. Sample: $-5°F$ is a reasonable temperature but is not a whole number.

## ✔ Checkpoint Quiz 2

**1.** $5w + 11$ **2.** 216 **3.** 100 **4.** 45 **5.** $-21 - 8w$

**6.** $6 + 5x$ **7.** 2.9 **8.** $-2\frac{1}{2}$ **9.** $-6x + 2y$

**10a.**

| | |
|---|---|
| $4w + 7w + 21$ | Distributive Prop. |
| $(4w + 7w) + 21$ | Assoc. Prop. of Add. |
| $(4 + 7)w + 21$ | Distributive Prop. |
| $11w + 21$ | Addition |

**10b.** $-23$

## Chapter Test, Form A

**1.** $s = 150m$ **2.** $r = 100 - t$ **3.** 20 **4.** 15 **5.** 16 **6.** $-32$

**7.** 29 **8.** $-16$ **9.** 8 **10.** 32.2 **11.** $-\frac{4}{5}$ **12.** $-3$

**13.** $\begin{bmatrix} 6 & -4 \\ 0 & -10 \end{bmatrix}$ **14.** $\begin{bmatrix} -1.3 & -10.4 \\ 3.1 & 0.1 \\ -0.1 & -0.7 \end{bmatrix}$

**15.** false; $\sqrt{2}$ is a real number that is not rational. **16.** true

**17.** $-2 + 3a$ **18.** $6 - 4a$ **19.** $4 - (x + 6)$ **20.** $\frac{n}{2} + 1$

**21.**

| | |
|---|---|
| $x - 2 + 3x$ | Distributive Prop. |
| $x + 3x - 2$ | Comm. Prop. of Add. |
| $(1 + 3)x - 2$ | Distributive Prop. |
| $4x - 2$ | Addition |

**22.**

| | |
|---|---|
| $(16 - 8)(1 - 9)$ | Exponents |
| $(8)(-8)$ | Subtraction |
| $-64$ | Multiplication |

**23.** $-7\frac{1}{10}$ **24.** $-6.6$
**25.** Addition was done before division; 13
**26.** Answers may vary. Sample: $|-7| - 4 - 3$
**27.** III **28.** $x$-axis **29.** 14 units$^2$ **30.** no change in depth
**31.** 26°F **32.** \$382.31 **33.** positive correlation
**34.** approximately 65 in. **35.** $\frac{2}{9}$ is less than 0.23 since $\frac{2}{9} = 0.\overline{2}$ and $0.\overline{2} < 0.23$.

## Chapter Test, Form B

**1.** $c = 3.45n$ **2.** $r = 162 - p$ **3.** 8 **4.** $-4.4$ **5.** $-2$ **6.** $-7$

**7.** 0 **8.** 49 **9.** $-5$ **10.** $-51.4$ **11.** $-\frac{6}{7}$ **12.** 5

**13.** $\begin{bmatrix} -10 & 30 \\ 16 & -2 \end{bmatrix}$ **14.** $\begin{bmatrix} 3.7 & -3.2 \\ -2.3 & -0.1 \\ 4.7 & -15.3 \end{bmatrix}$

**15.** true **16.** false; Answers may vary. Sample: The opposite of $|7|$ is $-7$ which is not positive. **17.** $-12 + 24b$
**18.** $-3 + b$ **19.** $4m + 5$ **20.** $x + 5(6 - x)$

**21.**

| | |
|---|---|
| $-7x + x - 1$ | Distributive Prop. |
| $(-7 + 1)x - 1$ | Distributive Prop. |
| $-6x - 1$ | Addition |

**22.**

| | |
|---|---|
| $(8 - 9)(16 - 64)$ | Exponents |
| $(-1)(-48)$ | Subtraction |
| 48 | Multiplication |

**23.** $-12\frac{1}{3}$ **24.** $-10.8$
**25.** Addition was done before multiplication; 17
**26.** Answers may vary. Sample: $-7$, $-36$, 14, $-15$, and $-11$
**27.** $y$-axis **28.** II **29.** 30 units$^2$ **30.** \$119.10
**31.** on the team's 16-yd line **32.** \$514.23
**33.** negative correlation **34.** one h
**35.** $-2\frac{5}{11}$ is less than $-2.45$ since $-2\frac{5}{11} = -2.\overline{45}$ and $-2.\overline{45} < -2.45$.

## Alternative Assessment, Form C

**TASK 1 Scoring Guide:**

**a.** $\frac{8x}{4} = 7 + x$ **b.** $5x - 8 = 32$

**c.** $x^2 + y = 42$ **d.** $\frac{1}{3}x + x = 3(x - 7)$

**3** Shows a clear understanding of the concepts of translating words to mathematical equations and can identify the key words or phrases. The sentences are all written correctly.

**2** Translations are given for each of the exercises with minor errors.

**1** Student makes some attempt to write the translations. The equations are translated incorrectly.

**0** No attempt is made, or no solution is presented.

**TASK 2 Scoring Guide:**

**a.** 26

**b.** In either case, the same order of operations must be followed.

**c.** Check students' work.

**3** Both expressions are correctly simplified. Each step is clearly identified and explained. The steps are compared, and explanations show a thorough understanding of grouping symbols, exponents, and order of operations. A new expression is presented and simplified correctly.

**2** The answer is mostly correct, but some steps are omitted. A clear explanation is given, but it shows a lesser degree of insight.

**1** The response is partially satisfactory, but major steps are omitted. Explanations are incomplete or unclear.

**0** No attempt is made, or no solution is presented.

**TASK 3 Scoring Guide:**

**a.** Check students' work.

**b.** Check students' work.

**c.** Sum is $\begin{bmatrix} 2 & -1 \\ 1.4 & -6.2 \end{bmatrix}$; difference is $\begin{bmatrix} -6 & 11.2 \\ 1.4 & 0.2 \end{bmatrix}$

**3** Clear and coherent rules are given. These show a thorough, in-depth understanding of operations using negative integers and rational numbers. Examples are appropriately chosen and clearly support the student's rules. The sum and difference of the two matrices are correctly calculated.

**2** Rules are given for most of the operations, with one or two operations omitted or unclear. Examples and matrix calculations are essentially correct, but may contain minor computational errors.

**1** Student makes some attempt to write rules and to find the sum and difference of the matrices. Example are omitted. Matrix operations are not well understood.

**0** No attempt is made, or no solution is presented.

**TASK 4 Scoring Guide:**

**a.** Bank A since the total amount of interest to be repaid is \$3600 compared to \$4000 with Bank B.

**b.** \$400

**3** For each loan, interest calculations are correctly computed and the total amount paid out over time is shown. Regardless of the loan selected, a clear and well-organized rationale is presented in favor of one loan over the other. The equation is correct and the variables are identified.

**2** There are minor computational errors, but reasoning in support of the loan selection is sound. The equation is correct but the variables are not identified.

**1** There are major computational errors, and the loan selection is not well supported. The equation is incorrect and the variables are not identified.

**0** No attempt is made, or no solution is presented.

## Cumulative Review

**1.** A **2.** B **3.** A **4.** D **5.** B **6.** C **7.** C **8.** C **9.** A **10.** A
**11.** D **12.** C **13.** 9 **14.** 9 **15.** 71 **16.** 23 **17.** $c = 1.5n$
**18.** $r = 8 - w$

**19.** $\begin{bmatrix} 3.4 & 0.3 \\ 3.3 & -0.6 \end{bmatrix}$ **20.** $\begin{bmatrix} 11 & 3 \\ 1 & 0 \\ -7 & 14 \end{bmatrix}$

**21.** Answers may vary. Sample: 30, −17, −80, 15, −8; To find the average of the five numbers, add them and divide by 5.
**22.** Addition was done before multiplication (distribution); $3x - 17$