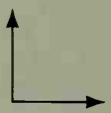
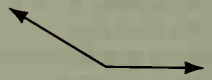
Algebra Review, Page 10

1. $c = 7$ **3.** $c = 17$ **5.** $z = 15$ **7.** $x = 5$ **9.** $x = 1$ **11.** $a = 12$ **13.** $b = -3$
15. $b = -\frac{2}{9}$ **17.** $k = \frac{1}{2}$ **19.** $e = 24$ **21.** $e = -15$ **23.** $p = 6$ **25.** $t = 8$ **27.** $s = 9$
29. $x = 15$ **31.** $g = 8$ **33.** $w = 8$ **35.** $y = 13$ **37.** $b = 5$ **39.** $h = 20$ **41.** $f = 15$
43. $d = -1$ **45.** $x = 45$

Written Exercises, Pages 15–16

1. 15 **3.** 4.5 **5.** True **7.** True **9.** False **11.** False **13.** True **15.** True **17.** False
19. B **21.** C, G **23.** D **25.** -1 **31. a.** 5 **b.** 10 **c.** 10 **d.** 6 **33.** $x = 6$ **35.** $x = 3$
37. $y = 6$ **39.** $z = 8$; $GE = 10$; $EH = 10$; yes **41.** $\overline{HN}$ **43.** $\overline{GT}$ **45.** M **47.** 2 if $AB \geq 3$ cm, 1 if $AB < 3$ cm

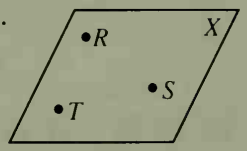
Written Exercises, Pages 21–22

1. E; $\overrightarrow{EL}$, $\overrightarrow{EA}$ Answers may vary in Exs. 3–7. **3.** $\angle DLT$ **5.** $\angle AEL$ **7.** $\angle 7$ **9.** acute **11.** right
13. straight **15.** LAS **17.** $\overrightarrow{LE}$, $\angle ALS$ **19.**  **21.**  **23.** 2

25. Yes; the sum of the measures of the angles is 180. **27.** $180 - t$, t, $180 - t$ **29.** $x = 18$
31. $x = 9$ **33.** $x = 20$ **35. a.** 6; 10 **b.** 15 **c.** $\frac{n(n-1)}{2}$

Written Exercises, Pages 25–26

1. If there is a line and a pt. not on the line, then one and only one plane contains them. **3. a.** a line **b.** If two planes intersect, then their intersection is a line. **5.** Through any 2 pts. there is exactly one line.
7. $ACGE$ **9.** $\overleftrightarrow{AB}$, $\overleftrightarrow{CD}$, $\overleftrightarrow{AD}$, $\overleftrightarrow{BC}$ **11.** $ABCD$, $DCGH$, $ABGH$ **13.** No **15.** No **17. a.** Through any 3 pts. there is at least one plane. **b.**



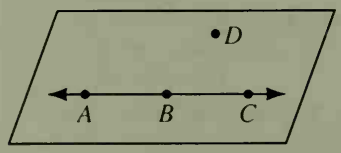
c. Yes; if 2 pts. are in a plane, then the line that contains the pts. is in that plane. **d.** Through any 2 pts. there is exactly one line. **e.** If 2 pts. are in a plane, then the line that contains the pts. is in that plane. **19. a.** 3 **b.** 6 **c.** 10 **d.** 15 **e.** 21 **f.** $\frac{n(n-1)}{2}$

Self-Test 2, Page 29

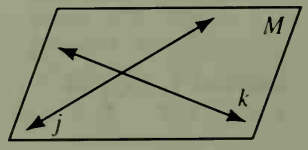
1. $\overrightarrow{RN}$, $\overrightarrow{RC}$, $\overrightarrow{NC}$ **2.** $\overrightarrow{NR}$ **3.** No **4.** $x = 2$ **5.** JOT **6.** $\overrightarrow{OK}$, JOT **7.** 180, straight **8.** c
9. there is exactly one line **10.** then $\overleftrightarrow{AB}$ is in Z **11.** their intersection is a line **12.** there is exactly one plane that contains j and P

Chapter Review, Page 30

1. infinitely many **3.** 2 **5.**



7.



9. U or V **11.** congruent **13.** $\angle 1$, $\angle 2$, $\angle ADC$; $\angle 1$, $\angle 2$ **15.** obtuse **17.** True **19.** False