

Test 9

- 1) $X - 16 = 42$
 $X = 42 + 16$
 $X = 58$
- 2) $(58) - 16 = 42$
 $42 = 42$
- 3) $-X + 4 = -2X - 6$
 $-X + 2X = -6 - 4$
 $X = -10$
- 4) $-(-10) + 4 = -2(-10) - 6$
 $10 + 4 = 20 - 6$
 $14 = 14$
- 5) $4R - 4 = 3R + 10$
 $4R - 3R = 10 + 4$
 $R = 14$
- 6) $4(14) - 4 = 3(14) + 10$
 $56 - 4 = 42 + 10$
 $52 = 52$
- 7) $2Y - 3 = Y - 4$
 $2Y - Y = -4 + 3$
 $Y = -1$
- 8) $2(-1) - 3 = (-1) - 4$
 $-2 - 3 = -5$
 $-5 = -5$
- 9) ± 25
- 10) ± 8
- 11) $-(3 \times 3) = -9$
- 12) $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$
- 13) $\frac{1}{4} \div \frac{1}{8} = \frac{8}{32} \div \frac{4}{32} = \frac{8 \div 4}{1} = 2$
- 14) $\frac{2}{3} \div \frac{1}{2} = \frac{4}{6} \div \frac{3}{6} = \frac{4 \div 3}{1} = \frac{4}{3}$
- 15) $\frac{5}{12} \div \frac{3}{4} = \frac{20}{48} \div \frac{36}{48} = \frac{20 \div 36}{1} = \frac{20}{36} = \frac{5}{9}$
- 16) $\frac{5}{6} \times \frac{6}{5} = \frac{30}{30} = 1$
- 17) $\frac{32}{1} \times \frac{1}{32} = \frac{32}{32} = 1$
- 18) $\frac{1}{9} \times \frac{9}{1} = \frac{9}{9} = 1$
- 19) $2X + 15 = 37 - 2$
 $2X = 35 - 15$
 $2X = 20$
 $X = 10$
- 20) $10 \div 5 = 2$
 $2 \times 2 = 4$

Test 10

- 1) $5^2 + 12^2 = H^2$
 $25 + 144 = H^2$
 $169 = H^2$
 $13 \text{ in.} = H$
- 2) $12^2 + 16^2 = 20^2$
 $144 + 256 = 400$
 $400 = 400$; yes
- 3) $L^2 + 9^2 = 15^2$
 $L^2 + 81 = 225$
 $L^2 = 225 - 81$
 $L^2 = 144$
 $L = 12$
- 4) $5^2 + 10^2 = 15^2$
 $25 + 100 = 225$
 $125 \neq 225$; no
- 5) $A - 7 = -13$
 $A = -13 + 7$
 $A = -6$
- 6) $(-6) - 7 = -13$
 $-13 = -13$
- 7) $10X - 8 = 9X + 8$
 $10X - 9X = 8 + 8$
 $X = 16$
- 8) $10(16) - 8 = 9(16) + 8$
 $160 - 8 = 144 + 8$
 $152 = 152$
- 9) $\pm X$
- 10) $(-8)(-8) = 64$
- 11) $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$
- 12) $\pm \frac{3}{4}$
- 13) $\frac{3}{8} \div \frac{1}{6} = \frac{3}{8} \times \frac{6}{1} = \frac{9}{4}$
- 14) $\frac{5}{9} \div \frac{1}{4} = \frac{5}{9} \times \frac{4}{1} = \frac{20}{9}$
- 15) $\frac{4}{5} \div \frac{3}{5} = \frac{4}{5} \times \frac{5}{3} = \frac{4}{3}$
- 16) $4 + 10 = 14$
- 17) 358.01
- 18) $3^2 + 4^2 = H^2$
 $9 + 16 = H^2$
 $25 = H^2$
 $5 \text{ mi.} = H$
- 19) $-2 \times 6 = -12 \text{ ft.}$
- 20) $2X + 5 = X - 5$
 $2X - X = -5 - 5$
 $X = -10$