6.1 Part 2 - Solving Two-Step Equations

Solve each equation.

1)
$$99 = 3 + 6x$$

2)
$$5x + 1 = 6$$

3)
$$11 = 5 + \frac{x}{3}$$

4)
$$-2k - 5 = -27$$

5)
$$-54 = 6(x+1)$$

6)
$$4 = \frac{k}{4} + 6$$

7)
$$-3 = -a + 10$$

8)
$$9(p-10) = -63$$

9)
$$-31 = 2v + 5$$

10)
$$-12 = -3(r+9)$$

11)
$$0.4 + 2.5v = 31.4$$

12)
$$29.12 = -1.6(n - 9.4)$$

13)
$$32.91 = -7.35 - 6.1m$$

14)
$$99.1 = -0.3 + 7n$$

15)
$$-4.4 = -0.9 + \frac{v}{5.6}$$

16)
$$72.98 = 4.6n - 4.3$$

- 17) Erica is thinking of a decimal number. If you divide her number by 3 then subtract 13.5, the result is 2.8. Write and solve an equation to determine her number.
- 18) A rectangle has width 1.2 cm and perimeter 6.6 cm. Find the length of the rectangle by writing a solving an appropriate equation.

- 19) Stephanie has a job in sales. She earns a monthly salary of \$2500, plus a commission of 8% of her sales. One month, she earned a total of \$2780. Write and solve an equation to determine her sales for that month.
- 20) A taxicab charges \$2.50, plus \$1.78 per kilometre. If a trip costs \$21.19, write and solve an equation that will allow you to determine the length of this trip.

Answers to 6.1 Part 2 - Solving Two-Step Equations

1) {16}

5) {-10} 9) {-18}

13) {-6.6}

17) 48.9

2) {1}

6) {-8}

10) {-5}

14) {14.2}

18) 2.1 cm

3) {18}

7) {13}

11) {12.4} 15) {-19.6}

19) \$3500

4) {11}

8) {3}

12) {-8.8}

16) {16.8}

20) 10.5 km