On Saturday, you bowl at Mar Vista Bowl, where renting shoes costs $2 and each game bowled is $3.50. On Sunday, you bowl at Pinz where the shoe rental is $5 and each game bowled is $3.25. If you spent the same amount each day, how many games, g, were bowled?

$$2 + 3.50g = 5 + \cancel{3.25g}$$
$$-3.25 \qquad -\cancel{3.25g}$$

$$\cancel{2} + 0.25g = 5$$
$$-\cancel{2} \qquad -2$$

$$\frac{0.25g}{0.25} = \frac{3}{0.25}$$

$$g = 12$$

$$2 + 3.5(12) = 5 + 3.25(12)$$
$$2 + 42 = 5 + 39$$
$$44 = 44$$

:)

A twelve inch candle and an 18 inch candle are lit at 6pm. The 12-in. candle burns 0.5 inches every hour. The 18 inch candle burns two inches every hour. At what time will the two candles be the same height? Let h represent the number of hours.

$$18 - 2h = 12 - 0.5h$$
$$+2h \qquad\qquad +2h$$

$$18 = 12 + 1.5h$$
$$-12 \qquad -12$$

$$\frac{6}{1.5} = \frac{1.5h}{1.5}$$

$$4 = h$$

$18 - 2(4) = 10$

$12 - 0.5(4) = 10$