

- 1 Use your calculator to work out $\sqrt{\frac{3}{4}} + 2^{-1}$.

Give your answer correct to 2 decimal places.

$$\sqrt{\frac{3}{4}} + 2^{-1} = 1.36602540378444... \\ \approx 1.37$$

Answer 1.37 [2]

2 $y = \frac{2}{x^2} + \frac{x^2}{2}$

Find the value of y when $x = 6$.

Give your answer as a mixed number in its simplest form.

$$y = \frac{2}{x^2} + \frac{x^2}{2} \\ = \frac{2}{6^2} + \frac{6^2}{2} \\ = \frac{2}{36} + \frac{36}{2} \\ = \frac{1}{18} + 18 \\ = 18 \frac{1}{18}$$

Answer $y = 18 \frac{1}{18}$ [2]

- 3 Solve the equation.

$$\frac{n-8}{2} = 11 \\ n-8 = 2 \cdot 11 \\ n-8 = 22 \\ n = 22+8 \\ n = 30$$

Answer $n = 30$ [2]