

- 4 The first three terms, in ascending powers of x , of the binomial expansion of $(1 - 8x)^{\frac{1}{2}}$ are

$$1 + nx - 8x^2$$

where n is a constant.

- 4 (a) State the range of values of x for which the expansion is valid.
Circle your answer.

[1 mark]

$$|x| > -8 \qquad |x| > -\frac{1}{8} \qquad |x| < \frac{1}{8} \qquad |x| < 8$$

- 4 (b) State the value of the constant n
Circle your answer.

[1 mark]

$$-16 \qquad -4 \qquad \frac{1}{2} \qquad 4$$