

$$4. A = \frac{1.5 \times 8 \times 120 \times 10^{-1}}{7.5 \times 4.8} \quad (\text{write in power of 10 form})$$

$$= \frac{15 \times 10^{-1} \times 8 \times 12 \times 10 \times 10^{-1}}{75 \times 10^{-1} \times 48 \times 10^{-1}} \quad (\text{simplifying exponents of same bases})$$

$$= \frac{15 \times 8 \times 12 \times 10}{75 \times 48} \quad (\text{Reducing to simple bases})$$

$$A = 4$$

$$B = \sqrt{\frac{30}{70}} \times \sqrt{\frac{7}{48}} \quad (\text{Reduce by 10})$$

$$= \sqrt{\frac{3}{7}} \times \sqrt{\frac{7}{48}} \quad (\text{write in form of one radical})$$

$$= \sqrt{\frac{3 \times 7}{7 \times 48}} \quad (\text{Reduce to lowest bases})$$

$$= \sqrt{\frac{1}{16}}$$

$$B = \frac{1}{4}$$

Hence  $A \times B = 1$  Choice B

5. The st. line  $y = ax + b$  is

Increasing, then its slope is positive i.e.  $a > 0$   
 Cuts positive y-axis then its y-intercept is positive i.e.  $b > 0$

Choice A