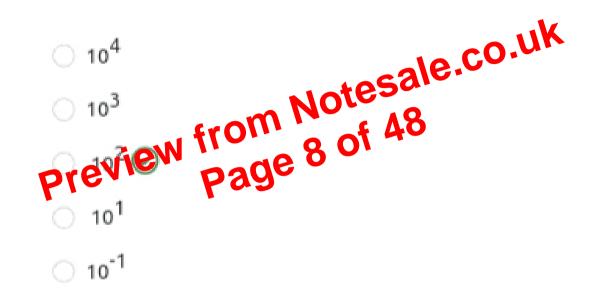


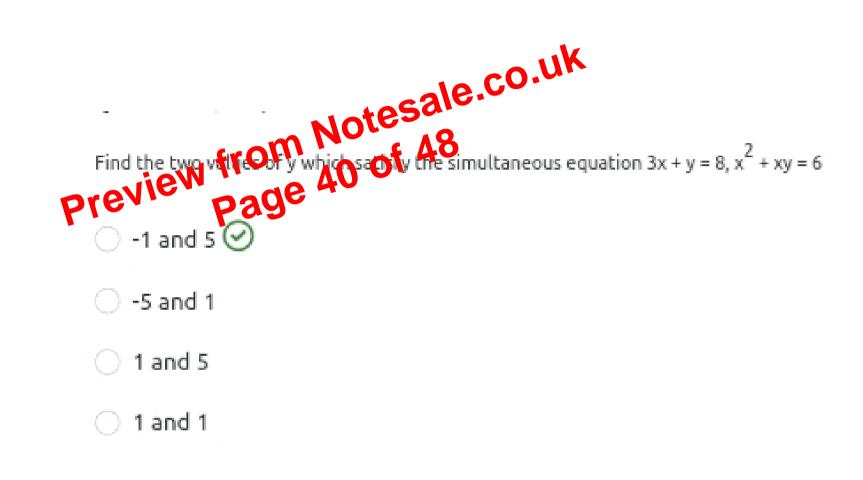
Given that 1/2 log₁₀ P = 1, find the value Of P



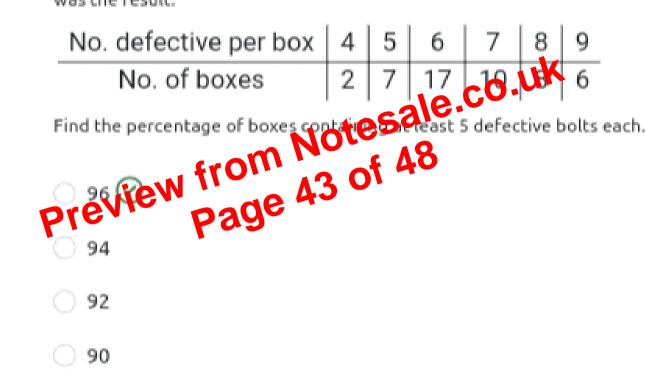
Answer Details

1/2log₁₀P log₁₀P^{1/2} = 1 P^{1/2} = 10 P = 10²





Fifty boxes each of 50 bolts were inspected for the number which were defective. The following was the result:

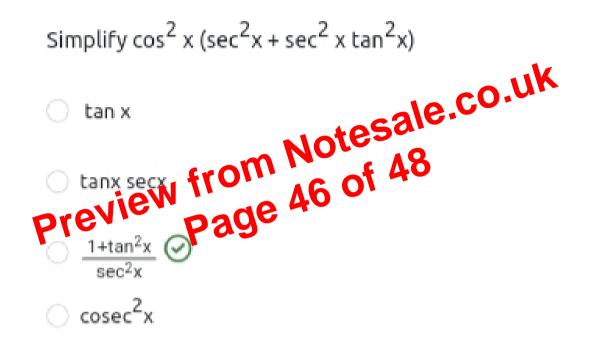


Answer Details

% of boxes containing at least 5 defective bolts each

 $= \frac{7+17+10+8+6}{50}$ $= \frac{48}{50} \times \frac{100}{1}$

= 96%



Answer Details

$$cos^{2} x (sec^{2}x + sec^{2} x tan^{2}x)$$

$$= \frac{cos^{2}x}{cos^{2}x} x \frac{cos^{2}xsin^{2}x}{cos^{2}xcos^{2}x}$$

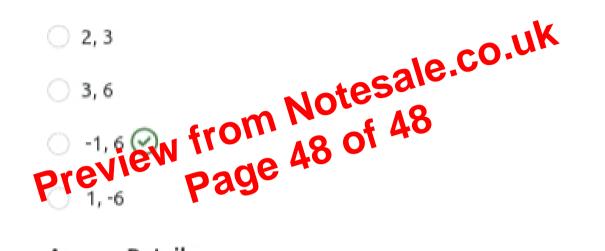
$$= \frac{1+sin^{2}x}{cos^{2}x}$$

$$= \frac{1+tan^{2}x}{sec^{2}x}$$

Answer Details

$$\frac{27}{5^{1}}(3)^{-3} \times \frac{(1)^{-1}}{5} = \frac{27}{5} \times \frac{1}{3^{3}} \times \frac{1}{\frac{1}{5}}$$
$$= \frac{27}{5} \times \frac{1}{27} \times \frac{5}{1}$$
$$= 1$$

Solve the equation (x - 2) (x - 3) = 12



Answer Details

$$(x - 2) (x - 3) = 12$$
$$x^{2} - 3x - 2x + 6 = 12$$
$$x^{2} - 5x - 6 = 0$$
$$(x - 1)(x - 6) = 0$$
$$x = -1 \text{ or } 6$$