

Use a joint variation equation,  $A = kxz$ :

$$150 = k(12)(25), \text{ so } k = \frac{1}{2}$$

Substitute  $k$  in a new joint variation equation using  $x = 20$  and  $z = 35$ :

$$A = \frac{1}{2}(20)(35), \text{ so } A = 350$$