



Пусть  $S(\triangle DOA) = x \Rightarrow S(\triangle BOC) = S(ABCD) - 8 - 12 - x$   
 $S(\triangle BOC) = 42 - 20 - x = 22 - x$

$$S(\triangle BOC) / S(\triangle BCD) = BO / BD$$

$$S(\triangle ABO) / S(\triangle ABD) = BO / BD$$

$$\Rightarrow S(\triangle BOC) / S(\triangle BCD) = S(\triangle ABO) / S(\triangle ABD)$$

$$\Rightarrow (22 - x) / (34 - x) = 8 / (8 + x)$$

$$8(34 - x) = (8 + x)(22 - x)$$

$$272 - 8x = 176 + 14x - x^2$$