Ex 4 Integers

Section A: Non calculator

1. Calculate:

a. -5×8 b. $-2 - 11$ c. $-9 \times (-4)$

d. $18 \div (-3)$ e. $21 - (-5)$ f. $-54 \div (-6)$

g. $-7 + (-9)$ h. $-7 \times (-6)$

Section B: Knowledge

2. If $a = 4$, $b = -3$ and $c = 9$, find the value of the following

a. $ab + c$ b. $-(bc)$ c. $\dfrac{b+c}{a}$

d. $-a(b + c)^2$ e. $b^2 - c$ f. $(abc)^2$

g. $c^2 - b$ h. $a^2 - 2b$

3. Simplify

a. $5a + (-2a)$ b. $-3p \times 4q$ c. $(-7r) \times (-7r)$

d. $\dfrac{-5y \times (-6y)}{-3}$

4. Solve the following equations for x:

a. $3x = -15$ b. $-7x = 49$ c. $-5x = -40$

d. $6x + 14 = 8$ e. $12 - 4x = 36$ f. $50 + 6x = 26$

g. $7x + 7 = 5x - 11$ h. $3x + 13 = 9 - 5x$

i. $4x - 8 = 6x - 14$

Section C: Mixed

5. A metal square, with side 7 cm, has a 2 cm diameter hole punched through its middle.
Find the area of the metal remaining (shaded area).