Factorization: Worksheet -4

1. $(a+b)^2-(a-b)^2$ =_ _ _ _ _ _ _ _ _ _

2. $(x-y)^2-(x+y)^2$ =_ _ _ _ _ _ _ _ _ _

3. _ _ _ _ _ _ _ _ should be added to $x^2+10x+22$ to make it a perfect square.

4. _ _ _ _ _ _ _ should be subtracted to $x^2+8x+20$ to make it a perfect square.

5. $\frac{(a+b)^2+(a-b)^2}{a^2+b^2}$ =_ _ _ _ _ _ _ _ _ _ _

6. $(a+b)^2 = (a-b)^2 +$ _ _ _ _ _ _ _ _ _ _

7. If a + b = 6 and ab = 8, then $a^2 + b^2$ = _ _ _ _ _ _ _ _ _ _

8. If x – y = 2 and xy = 15, then $x^2 + y^2$ = _ _ _ _ _ _ _ _ _ _

10. The difference of a square of two quantities is equal to the _ _ _ _ _ _ _ _ _ of their sum and their difference.

11. $\frac{a^2-b^2}{a-b}$ =_ _ _ _ _ _ _ _ _ _ _