$\qquad$

1) Find the value of ' $j$ ' by completing the square of the following equation: ${ }^{2}+$ $6 \mathrm{j}+9$

Answer: $\qquad$
4) Find the value of 'j' by completing the square of the following equation: ${ }^{2}+$ $6 j+9$

Answer: $\qquad$
7) Find the value of 's' by completing the square of the following equation: ${ }^{2}+$ $4 s+4$

Answer: $\qquad$
10) Find the value of ' $f$ ' by completing the square of the following equation: $2+12 f+20$

Answer: $\qquad$
13) Find the value of ' $q$ ' by completing the square of the following equation: $2+12 q+20$
2) Find the value of 'q' by completing the square of the following equation: ${ }^{2}+$ $8 q+12$

## Answer:

5) Find the value of 's' by completing the square of the following equation: ${ }^{2}+$ $8 s+16$

## Answer:

8) Find the value of ' $f$ ' by completing the square of the following equation: ${ }^{2}+$ $8 \mathrm{f}+15$

Answer: $\qquad$
11) Find the value of ' $x$ ' by completing the square of the following equation: $2+6 x+9$

## Answer:

$\qquad$
14) Find the value of 's' by completing the square of the following equation: $2+4 s+4$
3) Find the value of 's' by completing the square of the following equation: ${ }^{2}+$ $6 s+9$

Answer: $\qquad$
6) Find the value of ' $f$ ' by completing the square of the following equation: ${ }^{2}+$ $6 f+9$

## Answer:

$\qquad$
9) Find the value of 'q' by completing the square of the following equation: ${ }^{2}+$ $8 q+16$

Answer: $\qquad$
12) Find the value of 's' by completing the square of the following equation: $2+8 s+12$

Answer: $\qquad$
15) Find the value of 's' by completing the square of the following equation: $2+12 s+20$

Answer: $\qquad$
16) Find the value of 'd' by completing the square of the following equation:
$2+4 d+4$

Answer: $\qquad$
19) Find the value of ' $x$ ' by completing the square of the following equation: $2+4 x+4$
17) Find the value of ' $q$ ' by completing the square of the following equation: $2+4 q+4$

Answer: $\qquad$
20) Find the value of 'd' by completing the square of the following equation: $2+12 d+20$
18) Find the value of ' $f$ ' by completing the square of the following equation: $2+6 f+9$

Answer: $\qquad$

Total: $\qquad$ / 20

## Answers:

| 1) $(\mathrm{j}+3)^{2}$ | 2) $(\mathrm{q}+4)^{2}-4$ | 3) $(\mathrm{s}+3)^{2}$ | 4) $(\mathrm{j}+3)^{2}$ | 5) $(\mathrm{s}+4)^{2}$ | $6)(\mathrm{f}+3)^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 8) $(\mathrm{f}+4)^{2}-1$ | 9) $(\mathrm{q}+4)^{2}$ | 10) $(\mathrm{f}+6)^{2}-16$ | 11) $(\mathrm{x}+3)^{2}$ | 12) $(\mathrm{s}+4)^{2}-4$ | $13)(\mathrm{q}+6)^{2}-16$ |
| $15)(\mathrm{s}+6)^{2}-16$ | 16) $(\mathrm{d}+2)^{2}$ | 17) $(\mathrm{q}+2)^{2}$ | $18)(\mathrm{f}+3)^{2}$ | $19)(\mathrm{x}+2)^{2}$ | 20) $(\mathrm{d}+6)^{2}-16$ |

