Factors, Products and Polynomials — Practice Test

Saskatchewan Foundations of Mathematics and Pre-calculus 10 • 25 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The greatest common factor of 31 and 77 is**

ANSWER _____

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2 **The factored form of 15x + 25 is**

A. 5(3x - 5)

B. 5(3x + 5)

C. 3x(5 + 5)

D. 15(x + 5)

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3 **The factored form of $x^2 + 4x + 4$ is**

- A $(x + 2)(x - 2)$
- B $(x + 2)^2$
- C $(x - 2)^2$
- D $(x + 2)(x + 3)$

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4 **When expanded, $(x + 4)^2$ is**

- A $x^2 + 16$
- B $x^2 - 8x + 16$
- C $x^2 + 8x + 16$
- D $x^2 + 8x - 16$

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5 **When expanded, $(x + 9)^2$ is**

- A $x^2 + 81$
- B $x^2 - 18x + 81$
- C $x^2 + 18x - 81$
- D $x^2 + 18x + 81$

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6 **The factored form of 24x + 40 is**

- A 8(3x + 5)
- B 8(3x - 5)
- C 3x(5 + 8)
- D 24(x + 5)

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7 **The factored form of $x^2 + 18x + 81$ is**

- **A** $(x + 9)(x - 9)$
- **B** $(x + 9)^2$
- **C** $(x - 9)^2$
- **D** $(x + 9)(x + 10)$

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8 **When expanded, $(x + 7)^2$ is**

- **A** $x^2 + 49$
- **B** $x^2 - 14x + 49$
- **C** $x^2 + 14x + 49$
- **D** $x^2 + 14x - 49$

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9 **The factored form of $x^2 - 4$ is**

- **A** $(x + 2)^2$
- **B** $(x - 2)^2$
- **C** $(x + 2)(x + 2)$
- **D** $(x + 2)(x - 2)$

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10 **The factored form of $12x + 20$ is**

- **A** $4(3x + 5)$
- **B** $4(3x - 5)$
- **C** $3x(5 + 4)$
- **D** $12(x + 5)$

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11 **The greatest common factor of 8 and 80 is**

ANSWER _____

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12 **The factored form of $x^2 - 9$ is**

A $(x + 3)^2$

B $(x + 3)(x - 3)$

C $(x - 3)^2$

D $(x + 3)(x + 3)$

Understand It with Pulse | Flag a mistake

13 **The factored form of $x^2 + 14x + 49$ is**

- **A** $(x + 7)(x - 7)$
- **B** $(x - 7)^2$
- **C** $(x + 7)^2$
- **D** $(x + 7)(x + 8)$

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14 **The factored form of $x^2 + 16x + 64$ is**

- **A** $(x + 8)(x - 8)$
- **B** $(x - 8)^2$
- **C** $(x + 8)(x + 9)$
- **D** $(x + 8)^2$

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15 **The greatest common factor of 57 and 46 is**

ANSWER _____

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16 **The factored form of 6x + 10 is**

A 2(3x + 5)

B 2(3x - 5)

C 3x(5 + 2)

D 6(x + 5)

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17 **When expanded, (x + 4)(x + 2) is**

- A $x^2 + 6x - 8$
- B $x^2 + 6x + 8$
- C $x^2 + 8x + 6$
- D $x^2 - 6x + 8$

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18 **The factored form of $x^2 - 64$ is**

- A $(x + 8)^2$
- B $(x - 8)^2$
- C $(x + 8)(x - 8)$
- D $(x + 8)(x + 8)$

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19 **The factored form of $x^2 + 12x + 27$ is**

- A $(x - 3)(x - 9)$
- B $(x + 3)(x - 9)$
- C $(x + 4)(x + 9)$
- D $(x + 3)(x + 9)$

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20 **When expanded, $(x + 4)(x + 4)$ is**

- A $x^2 + 8x + 16$
- B $x^2 + 8x - 16$
- C $x^2 + 16x + 8$
- D $x^2 - 8x + 16$

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21 **When expanded, (x + 5)(x + 2) is**

A $x^2 + 7x - 10$

B $x^2 + 7x + 10$

C $x^2 + 10x + 7$

D $x^2 - 7x + 10$

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22 **When expanded, (x + 2)(x + 4) is**

A $x^2 + 6x - 8$

B $x^2 + 8x + 6$

C $x^2 + 6x + 8$

D $x^2 - 6x + 8$

Understand It with Pulse | Flag a mistake

23 The greatest common factor of 77 and 36 is

ANSWER _____

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24 The greatest common factor of 89 and 78 is

ANSWER _____

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25 The factored form of 9x + 15 is

A. 3(3x - 5)

B. 3x(5 + 3)

C. 9(x + 5)

D. 3(3x + 5)

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ANSWER KEY

1.	1	**10.**	A	**19.**	D
2.	B	**11.**	8	**20.**	A
3.	B	**12.**	B	**21.**	B
4.	C	**13.**	C	**22.**	C
5.	D	**14.**	D	**23.**	1
6.	A	**15.**	1	**24.**	1
7.	B	**16.**	A	**25.**	D
8.	C	**17.**	B		
9.	D	**18.**	C		

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