

Limits

Moderate

Factoring

1. $\lim_{x \rightarrow 4} \left(\frac{x^2 - 6x + 8}{x - 4} \right)$

2. $\lim_{x \rightarrow 2} \left(\frac{x^2 - 4}{x - 2} \right)$

3. $\lim_{x \rightarrow -2} \left(\frac{x + 2}{x^3 + 8} \right)$

4. $\lim_{x \rightarrow -5} \left(\frac{x^2 - 25}{x^2 + 4x - 5} \right)$

5. $\lim_{x \rightarrow 1} \left(\frac{x^3 - x}{x^2 - 1} \right)$

6. $\lim_{x \rightarrow -1} \left(\frac{x^2 + x}{x + 1} \right)$

7. $\lim_{x \rightarrow 4} \left(\frac{5x - 20}{x - 4} \right)$

8. $\lim_{x \rightarrow 5} \left(\frac{x^2 - 5x}{x - 5} \right)$

9. $\lim_{x \rightarrow -1} \left(\frac{x^3 + x^2}{x + 1} \right)$

10. $\lim_{x \rightarrow 1} \left(\frac{x^2 - 1}{x - 1} \right)$

Answers

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1. 2

2. 4

3. $\frac{1}{12}$

4. $\frac{5}{3}$

5. 1

6. -1

7. 5

8. 5

9. 1

10. 2