

Answers to Classwork Synthetic Division

1. $x-1+\frac{3}{x-2}$

2. $2x-4+\frac{17}{x+2}$

3. $2x^2-x-4-\frac{6}{x-3}$

4. $x^2-2x-3+\frac{2}{x+2}$

5. $3x^2-x-1+\frac{4}{x+4}$

6. $2x^3-x^2-4x-6$

7. $x^2-5x+25$

8. $x^5+2x^4+4x^3+8x^2+16x+32$

9. *yes, factor*
 $f(x) = (x-2)(x^2+3x-5)$

10. *no, not a factor*