EXTRA PRACTICE — Exercises

Unit V – Second Degree Relations and Higher - Polynomials
Part B – Polynomials
Lesson 2 – Definition and Terminology

Tell which of the following algebraic expressions are polynomials, then for each polynomial tell how many terms it contains.

1. $7\sqrt{3}+5\sqrt{x}$
2. $\dfrac{7x+2}{3}$
3. $\dfrac{7}{3}x+\dfrac{2}{3}$
4. $\dfrac{1}{3}x^2+8$
5. $x^3+x^{-2}-7$
6. $x^{-4}+y^2-6$
7. $\dfrac{1}{y}-6x^2$
8. $\dfrac{4}{a^2+ab+b^2}$
9. $40n^2$
10. $\dfrac{3}{4}x^2+\dfrac{1}{2}x-2$
11. 65
12. y
13. $\dfrac{5}{x}+\dfrac{3}{y}-6$
14. $\dfrac{3}{4y^2-4}-7y$
15. $4x^4y^3-6x^2y$
16. $\sqrt{x-6}$
17. $5x^{\frac{1}{2}}-6$
18. $\dfrac{x}{5}$
19. $\dfrac{4x^2}{x}+16y^2$
20. $\dfrac{1}{3}y^4-\dfrac{2}{3}y^2+5x-3$

EXTRA PRACTICE — Answer Key

Unit V – Second Degree Relations and Higher - Polynomials
Part B – Polynomials
Lesson 2 – Definition and Terminology

Tell which of the following algebraic expressions are polynomials, then for each polynomial tell how many terms it contains.

1. no

2. yes, 1 as it is; 2 if simplified to $\frac{7x}{3}+\frac{2}{3}$

3. yes, 2 (same as exercise #2)

4. yes, 2

5. no

6. no

7. no

8. no

9. yes, 1

10. yes, 3

11. yes, 1

12. yes, 1

13. no

14. no

15. yes, 2

16. no

17. no

18. yes, 1

19. No (as it is); yes if simplified to $4x+16y^2$ in which case there are two terms

20. yes, 4