

ANSWERS

In addition to the answer, we have provided a difficulty rating for each problem. Our scale is 1-7, with 7 being the most difficult. These are only approximations, and how difficult a problem is for a particular student will vary. Below is a general guide to the ratings:

Difficulty 1/2/3 - One concept; one- to two-step solution; appropriate for students just starting the middle school curriculum.

4/5 - One or two concepts; multistep solution; knowledge of some middle school topics is necessary.

6/7 - Multiple and/or advanced concepts; multistep solution; knowledge of advanced middle school topics and/or problem-solving strategies is necessary.

Warm-Up 1

Answer	Difficulty			
1. 77	(1)	6. 30	(4)	
2. $3\frac{1}{5}$	(2)	7. $9/16$	(4)	
3. 11	(2)	8. 1.7×10^5	(2)	
4. 1	(2)	9. 0	(3)	
5. $1/6$	(2)	10. 170 or 170.00	(2)	

Warm-Up 2

Answer	Difficulty			
11. 16	(2)	16. 720	(3)	
12. 5	(3)	17. 36	(5)	
13. 12	(3)	18. $7/12$	(4)	
14. 5	(3)	19. 12	(3)	
15. 3.16×10^{-14}	(4)	20. $2\sqrt{17}$	(4)	

Warm-Up 3

Answer	Difficulty			
21. 22	(2)	26. $25/81$	(4)	
22. 3	(2)	27. $18/25$	(4)	
23. 8	(2)	28. 8	(4)	
24. 621	(1)	29. 6	(4)	
25. 9	(4)	30. 1	(2)	

Workout 1

Answer	Difficulty			
31. 1.30	(3)	36. 7	(4)	
32. 721	(4)	37. Q	(3)	
33. 1100	(4)	38. 16	(2)	
34. 12	(4)	39. 6	(3)	
35. 14.6	(4)	40. 36	(4)	

Workout 2

Answer	Difficulty			
41. 1^*	(3)	46. 4	(4)	
42. 90	(3)	47. $1/4$	(4)	
43. 1.65	(3)	48. 36	(4)	
44. 41	(1)	49. 7	(4)	
45. 120	(4)	50. 21.3	(4)	

Warm-Up 4

Answer	Difficulty			
51. 88	(4)	56. 380	(3)	
52. 86	(3)	57. $15/64$	(4)	
53. 38	(4)	58. -3	(2)	
54. 12	(2)	59. $2/5$	(4)	
55. $1/64$	(3)	60. 8	(3)	

* The plural form of the units is always provided in the answer blank, even if the answer appears to require the singular form of the units.