

Solutions to Homework 1

1. a
2. a
3. b
4. a
5. b
6. b
7. e
8. f
9. d
10. f
11. a,c
12. e
13. b
14. $\frac{4}{10} + \frac{3}{10} = \frac{7}{10}$
15. $\frac{3}{10} - \frac{8}{10} = \frac{-5}{10} = \frac{-1}{2}$
16. $\frac{4}{84} = \frac{1}{21}$
17. $\frac{1}{12} * \frac{7}{4} = \frac{7}{48}$
18. $-8 * 83 * \frac{1}{2} = -4 * 83 = -332$
19. 1
20. 1200
21. 1234.87
22. 1235
23. $165 \text{ cm} \times \frac{1 \text{ in}}{2.54 \text{ cm}} = 64.96 \text{ in} - 60 \text{ in} = 4.96 \text{ inches over 5 feet IBW} = 100 + 5(4.96) = 124.8 \text{ lbs}$
24. 0.00146
25. 164.2
26. $\left[\frac{27 - \frac{121}{2} - \frac{1}{3} + 1}{(4)} \right]^2 = \left[\frac{28 - \frac{121}{2} - \frac{1}{3}}{(4)} \right]^2 = \left[\frac{\frac{168 - 363 - 2}{6}}{4} \right]^2 = \left[\frac{-197}{24} \right]^2 = 67.36$

27. $6xy + 2x^2y$ or $2xy(3 + x)$

28. $3xy - 5x^2 - y^2 + 4y = x(3y - 5x) + y(4 - y)$ or $-5x^2 + y(3x - y + 4)$

29. 64

30. $\frac{1}{64}$

31. 2

32. $y = \frac{-50(16)+100(14)}{3500} = \frac{-800+1400}{3500} = \frac{600}{3500} = .171$

Gained 0.171 lbs

33. $\text{BMI} = \frac{70}{1.6^2} = \frac{70}{2.56} = 27.3$

34. $125 \text{ lbs} \times .45 \text{ kg/lb} = 56.25 \text{ kg}$

$\text{BMI} = \frac{56.25}{1.62^2} = 21.43$

35. 170 calories