

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

1. Find the volume: $(\frac{1}{2}) \times (\frac{3}{4}) \times (\frac{5}{6})$.
2. Find the volume: $(\frac{2}{3}) \times (\frac{3}{5}) \times (\frac{1}{4})$.
3. Find the volume: $1 \frac{1}{2} \times 2 \times \frac{1}{3}$.
4. Find the volume: $(\frac{3}{4}) \times (\frac{3}{4}) \times (\frac{3}{4})$.
5. Find the volume: $(\frac{5}{6}) \times (\frac{1}{2}) \times (\frac{2}{5})$.
6. Find the volume: $(\frac{1}{3}) \times (\frac{4}{5}) \times (\frac{3}{2})$.
7. Find the volume: $2 \frac{1}{2} \times \frac{1}{2} \times \frac{1}{3}$.
8. Find the volume: $(\frac{7}{8}) \times (\frac{2}{3}) \times (\frac{3}{7})$.
9. Find the volume: $(\frac{1}{4}) \times (\frac{1}{4}) \times (\frac{1}{4})$.
10. Find the volume: $1 \frac{2}{3} \times \frac{3}{4} \times \frac{1}{2}$.
11. A rectangular prism has dimensions $\frac{1}{2}$ by $\frac{3}{4}$ by 2. If the length is doubled, what is the new volume?
12. A rectangular prism has dimensions $\frac{3}{4}$ by $\frac{1}{3}$ by 2. If the width is increased by 50%, what is the new volume?
13. A prism measures $1 \frac{1}{2}$ by $\frac{2}{3}$ by 4. If the height is reduced by $\frac{1}{4}$ (i.e., multiplied by $\frac{3}{4}$), what is the new volume?
14. A prism has dimensions $\frac{2}{5}$ by $\frac{3}{2}$ by 5. If the length is tripled, what is the new volume?
15. A prism has dimensions $\frac{1}{3}$ by $\frac{1}{2}$ by 3. If all dimensions are doubled, what is the new volume?
16. A prism measures $\frac{3}{4}$ by $\frac{5}{6}$ by 2. If the width is halved, what is the new volume?
17. A prism has dimensions $1 \frac{1}{4}$ by $\frac{1}{2}$ by 4. If the height is increased by 25% (multiplied by $\frac{5}{4}$), what is the new volume?
18. A prism has dimensions $\frac{2}{3}$ by $\frac{3}{5}$ by 6. If the length is decreased by $\frac{1}{3}$ (multiplied by $\frac{2}{3}$), what is the new volume?
19. A prism measures $\frac{3}{2}$ by $\frac{2}{3}$ by 3. If each dimension is halved, what is the new volume?
20. A prism measures $\frac{5}{6}$ by $\frac{4}{5}$ by $\frac{3}{2}$. If the height is doubled, what is the new volume?
21. A box is $1 \frac{1}{2}$ ft by $\frac{3}{4}$ ft by 2 ft. Find its volume.
22. A crate measures $2 \frac{1}{2}$ m by $\frac{1}{3}$ m by 3 m. Find its volume.
23. A tank is $\frac{4}{5}$ m long, $\frac{1}{2}$ m wide, and $1 \frac{1}{2}$ m high. Find the volume.
24. A gift box is $\frac{7}{8}$ by $\frac{1}{2}$ by $2 \frac{1}{4}$. Find the volume.
25. A small aquarium is $\frac{1}{3}$ m by $\frac{1}{4}$ m by $\frac{3}{2}$ m. Find the volume.
26. A moving box is $1 \frac{1}{4}$ ft by 2 ft by $2 \frac{1}{2}$ ft. Find the volume.
27. A cereal box measures $\frac{3}{10}$ m by $\frac{2}{5}$ m by 1 m. Find the volume.
28. A planter measures $2 \frac{2}{3}$ ft by $\frac{3}{4}$ ft by $\frac{1}{2}$ ft. Find the volume.
29. A shoebox measures $\frac{5}{6}$ ft by $\frac{2}{3}$ ft by $\frac{3}{5}$ ft. Find the volume.
30. A package measures $1 \frac{3}{4}$ by $\frac{2}{5}$ by $\frac{4}{3}$. Find the volume.
31. A box had length $\frac{1}{2}$, width $\frac{2}{3}$, height 1. If the length is increased to $\frac{3}{4}$, by how much does the volume change?
32. A water tank has length $\frac{3}{4}$ and width $\frac{2}{3}$. If its volume is $\frac{3}{2}$, what is the height?



Math Worksheet for 6th Grade

Volume with fractions

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33. A rectangular prism measures $\frac{1}{2}$ by $\frac{2}{3}$ by $\frac{3}{4}$. If the height is tripled, what is the new volume?
34. A bakery box is $1\frac{1}{2}$ by $\frac{1}{2}$ by $\frac{1}{3}$. Find the volume.
35. A toy box measures $\frac{2}{5}$ by $\frac{3}{4}$ by $\frac{5}{3}$. Find the volume.
36. A rectangular prism has length $\frac{4}{5}$ and width $\frac{3}{10}$. If the desired volume is $\frac{6}{25}$, what must the height be?
37. A box measures $\frac{7}{10}$ by $\frac{2}{3}$ by h and has volume $\frac{7}{15}$. Find h .
38. A box measures $\frac{1}{3}$ by $\frac{1}{4}$ by $\frac{3}{2}$. If the length is multiplied by $\frac{3}{2}$ and the width is doubled, what is the new volume?
39. A prism measures $\frac{5}{4}$ by $\frac{3}{2}$ by $\frac{2}{5}$. If each dimension is multiplied by $\frac{1}{5}$, what is the new volume?
40. Small boxes measure $\frac{9}{10}$ by $\frac{2}{3}$ by $\frac{3}{5}$. How many whole small boxes fit into a larger box of volume 6?
41. Find the volume: $2\frac{1}{3} \times \frac{3}{4} \times \frac{1}{2}$.
42. Find the volume: $\frac{1}{6} \times \frac{4}{5} \times 3$.
43. Find the volume: $2\frac{1}{2} \times \frac{3}{10} \times 4$.
44. A prism has base area $\frac{7}{8}$ and height $1\frac{1}{4}$. Find the volume.
45. Find the volume: $\frac{1}{2} \times \frac{2}{5} \times 1\frac{1}{5}$.
46. Find the volume: $1\frac{2}{3} \times \frac{3}{5} \times 1$.
47. A prism has length $\frac{4}{7}$ and width $\frac{7}{8}$. If its volume is 2, what is the height?
48. Find the volume: $\frac{3}{5} \times \frac{5}{6} \times \frac{7}{10}$.
49. Find the volume: $\frac{8}{9} \times \frac{9}{10} \times \frac{10}{11}$.
50. A prism measures $\frac{1}{4}$ by $\frac{2}{3}$ by 3. If the height is increased by 50%, what is the new volume?