

Dimensional Analysis WS

Directions: Solve USING DIMENSIONAL ANALYSIS (line method). Even if you feel you can solve them a different way, you need to use dimensional analysis because that is the technique we are learning/practicing. Some answers are in bold.

- 1) Convert 32.7 in into ft (**2.73**)
- 2) Convert 20.1 cm to in
- 3) My cat, Harley, weighs 8.7 lbs. How much does she weigh in kilograms? (**3.95**)
- 4) Convert 8.4 Kg into pounds
- 5) Convert 3100 in to mi (**0.049**)
- 6) Convert 14 weeks into seconds
- 7) Convert 5.93 yards into mm (**5422.4**)
- 8) You're throwing a pizza party for 15 people. Each person will eat 4 slices. You call up the pizza place and find that each pizza will be cut into 12 slices, and each pizza will cost you \$14.78. How much is the pizza going to cost you? You only have \$70. Will you have enough money? (**73.90, no**)
- 9) The bedroom of a house is 1,200 cubic meters. We know that there are 3.4×10^9 particles of dust per cubic meter. How many particles of dust are present in the bedroom of our house? Eww!
- 10) Find out the weight of 6 billion (6,000,000,000) dust particles in pounds, if one dust particle has a mass of 7.53×10^{-10} g.

Dimensional Analysis WS

Directions: Solve USING DIMENSIONAL ANALYSIS (line method). Even if you feel you can solve them a different way, you need to use dimensional analysis because that is the technique we are learning/practicing. Some answers are in bold.

- 1) Convert 32.7 in into ft (**2.73**)
- 2) Convert 20.1 cm to in
- 3) My cat, Harley, weighs 8.7 lbs. How much does she weigh in kilograms? (**3.95**)
- 4) Convert 8.4 Kg into pounds
- 5) Convert 3100 in to mi (**0.049**)
- 6) Convert 14 weeks into seconds
- 7) Convert 5.93 yards into mm (**5422.4**)
- 8) You're throwing a pizza party for 15 people. Each person will eat 4 slices. You call up the pizza place and find that each pizza will be cut into 12 slices, and each pizza will cost you \$14.78. How much is the pizza going to cost you? You only have \$70. Will you have enough money? (**73.90, no**)
- 9) The bedroom of a house is 1,200 cubic meters. We know that there are 3.4×10^9 particles of dust per cubic meter. How many particles of dust are present in the bedroom of our house? Eww!
- 10) Find out the weight of 6 billion (6,000,000,000) dust particles in pounds, if one dust particle has a mass of 7.53×10^{-10} g.

Dimensional Analysis WS

Directions: Solve USING DIMENSIONAL ANALYSIS (line method). Even if you feel you can solve them a different way, you need to use dimensional analysis because that is the technique we are learning/practicing. Some answers are in bold.

- 1) Convert 32.7 in into ft (**2.73**)
- 2) Convert 20.1 cm to in
- 3) My cat, Harley, weighs 8.7 lbs. How much does she weigh in kilograms? (**3.95**)
- 4) Convert 8.4 Kg into pounds
- 5) Convert 3100 in to mi (**0.049**)
- 6) Convert 14 weeks into seconds
- 7) Convert 5.93 yards into mm (**5422.4**)
- 8) You're throwing a pizza party for 15 people. Each person will eat 4 slices. You call up the pizza place and find that each pizza will be cut into 12 slices, and each pizza will cost you \$14.78. How much is the pizza going to cost you? You only have \$70. Will you have enough money? (**73.90, no**)
- 9) The bedroom of a house is 1,200 cubic meters. We know that there are 3.4×10^9 particles of dust per cubic meter. How many particles of dust are present in the bedroom of our house? Eww!
- 10) Find out the weight of 6 billion (6,000,000,000) dust particles in pounds, if one dust particle has a mass of 7.53×10^{-10} g.

Dimensional Analysis WS

Directions: Solve USING DIMENSIONAL ANALYSIS (line method). Even if you feel you can solve them a different way, you need to use dimensional analysis because that is the technique we are learning/practicing. Some answers are in bold.

- 1) Convert 32.7 in into ft (**2.73**)
- 2) Convert 20.1 cm to in
- 3) My cat, Harley, weighs 8.7 lbs. How much does she weigh in kilograms? (**3.95**)
- 4) Convert 8.4 Kg into pounds
- 5) Convert 3100 in to mi (**0.049**)
- 6) Convert 14 weeks into seconds
- 7) Convert 5.93 yards into mm (**5422.4**)
- 8) You're throwing a pizza party for 15 people. Each person will eat 4 slices. You call up the pizza place and find that each pizza will be cut into 12 slices, and each pizza will cost you \$14.78. How much is the pizza going to cost you? You only have \$70. Will you have enough money? (**73.90, no**)
- 9) The bedroom of a house is 1,200 cubic meters. We know that there are 3.4×10^9 particles of dust per cubic meter. How many particles of dust are present in the bedroom of our house? Eww!
- 10) Find out the weight of 6 billion (6,000,000,000) dust particles in pounds, if one dust particle has a mass of 7.53×10^{-10} g.