



Geometry Homework

Perimeter

Hwrk Perimeter Wheels etc_2.doc (1-29-15)

Name _____

Calculate the following to three significant digits. Ie x.xxx

1. Harley changed the tires on his pickup from 19" OD to 42" OD to try to impress others.

How many revolutions do the small tires make in one mile? _____

How many revolutions do the big tires make in one mile? _____

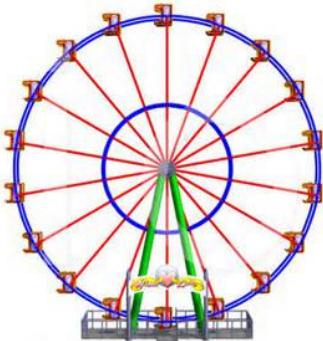
When the speedometer says 30 mph what is his calculated speed?

Will the patrolman give him a ticket for speeding? _____

2. What is the speed of the outside diameter of the carnival ride if it is spinning at 15 rpm and is 28 feet in diameter? _____



3. The ferris wheel at the carnival was 106' in diameter and spun at 3.7 rpm.



How many feet per minute does the OD travel at full speed? _____

How many miles per hour is that? _____

Approximate:

How many people can this ride hold? _____

How much weight is that? _____

4. The front tractor tires have an OD of 48" and the back tires have an OD of 69".

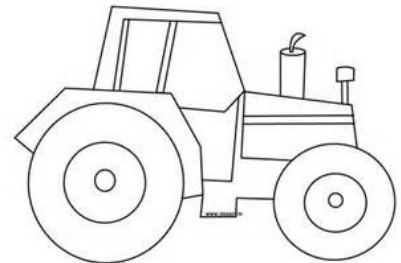
How far do the front tires move in one full revolution? _____

How far do the back tires move in one full revolution? _____

How many revolutions:

Do the front tires turn to go one mile? _____

Do the back tires turn to go one mile? _____



5. Cinnamon changed the tires on a pickup from 18" OD to 41" OD.

How many revolutions do the small tires make in one mile? _____

How many revolutions do the big tires make in one mile? _____

When the speedometer says 55 mph what is his calculated speed?

Will the patrolman give the driver a ticket for speeding? _____



6. The wind tower blade tips make a 204' diameter and spun at 4.35 rpm.



How many feet per minute does the OD travel at full speed? _____

How many miles per hour is that? _____

7. The front tractor tires have an OD of 51" and the back tires have an OD of 74".

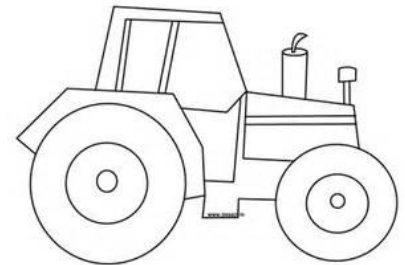
How far do the front tires move in one full revolution? _____

How far do the back tires move in one full revolution? _____

How many revolutions:

Do the front tires turn to go one mile? _____

Do the back tires turn to go one mile? _____



8. What is the speed of the outside diameter of the carnival ride if it is spinning at 15 rpm and is 28 feet in diameter? _____



9. How far does the earth spin in one Minute? _____ degrees or _____ feet

How far does the earth spin in one Hour? _____

How far does the earth spin in five Seconds? _____