Answers to Problems

1. $570\*.869=495.33 kts$

$$642=495.33\*t$$

$$t=1.30 hrs$$

$$≈1 hr and 18 minutes$$

So the plane will arrive at 4:18pm central time or 3:18pm eastern time.

1. No. The two planes are the same distance apart from TPH and traveling at the same speed. This means they’re going to collide if the air traffic controller doesn’t change anything.
2. Pick any speed slower than 600 knots.
3. $35=600\*t$

$$t=0.05833$$

$$32=r\*0.05833$$

$$r=548.603 kts$$

1. The teacher will check 5 and 6 by watching the groups’ simulations
2. The teacher will check 5 and 6 by watching the groups’ simulations
3. Picture:

 300nm

 30nm

Destination

B

A

500 statute miles per hour \* 0.869 = 434.5 kts

$$270nm=434.5kts\*t$$

$$t=0.6214 hrs$$

$$297nm=r\*0.6214hrs$$

R = 477.95kts