Relative Velocity Practice

Practice makes perfect. Do as many of these problems as you need to in order master relative velocities. You have mastered this skill when you can do six problems in half an hour, without mistakes.

1. E-Han is jogging at 2.4 m/s [N7°W]. Allison is walking at 2.5 m/s [N38°E]. What is Allison's velocity relative to E-Han?

2. Andrew is walking at 2.3 m/s [N17°E]. Priya is jogging at 2.1 m/s [N13°E]. What is Priya's velocity relative to Andrew?

3. Douglas is running at 3.9 m/s [S17°E]. Isbah is running at 6.4 m/s [S11°E]. What is Douglas's velocity relative to Isbah?

4. Aymen is jogging at 2.9 m/s [S22°E]. Iris is walking at 1.6 m/s [N32°E]. What is Iris's velocity relative to Aymen?

5. Eric is walking at 2.0 m/s [N19°E]. Tiffany is walking at 1.8 m/s [N68°W]. What is Tiffany's velocity relative to Eric?

6. Shahnee is jogging at 3.0 m/s [N17°W]. Eric is running at 5.7 m/s [N7°E]. What is Eric's velocity relative to Shahnee?

7. Simran is jogging at 2.0 m/s [N24°E]. Aymen is running at 8.2 m/s [N79°W]. What is Simran's velocity relative to Aymen?

8. Flora is running at 7.2 m/s [N73°E]. Regulan is jogging at 2.6 m/s [N14°E]. What is Regulan's velocity relative to Flora?

9. Aarun is walking at 1.8 m/s [S33°W]. Christine is jogging at 3.0 m/s [S81°W]. What is Christine's velocity relative to Aarun?

10. Samantha is walking at 1.6 m/s [N65°E]. Eric is running at 5.5 m/s [S3°W]. What is Eric's velocity relative to Samantha?

11. Alice is walking at 1.5 m/s [N66°E]. Bowen is jogging at 2.0 m/s [N16°E]. What is Alice's velocity relative to Bowen?

12. Aarun is jogging at 2.8 m/s [N17°W]. Alice is walking at 1.6 m/s [S69°W]. What is Aarun's velocity relative to Alice?

13. Hasham is running at 8.6 m/s [S7°E]. Priya is walking at 2.4 m/s [N82°W]. What is Priya's velocity relative to Hasham?

14. Kari is jogging at 2.3 m/s [S2°E]. Aarun is jogging at 2.4 m/s [S84°E]. What is Kari's velocity relative to Aarun?

15. Aditya is jogging at 3.0 m/s [N40°W]. Tiffany is jogging at 2.3 m/s [N62°E]. What is Tiffany's velocity relative to Aditya?

16. Timothy is jogging at 2.7 m/s [N69°E]. Isbah is walking at 1.0 m/s [S4°W]. What is Isbah's velocity relative to Timothy?

17. Angus is jogging at 2.4 m/s [N34°E]. Nicole is jogging at 2.4 m/s [N17°E]. What is Angus's velocity relative to Nicole?

18. Simran is walking at 2.3 m/s [N47°E]. Angus is walking at 2.1 m/s [N22°E]. What is Angus's velocity relative to Simran?

19. Nicole is walking at 1.2 m/s [N84°E]. Aarun is walking at 1.3 m/s [N38°E]. What is Nicole's velocity relative to Aarun?

20. Quinie is walking at 1.3 m/s [N83°E]. Davin is walking at 1.3 m/s [S34°W]. What is Davin's velocity relative to Quinie?

21. Shaminth is jogging at 2.3 m/s [S45°E]. Simran is running at 11.0 m/s [N39°E]. What is Simran's velocity relative to Shaminth?

22. Patrick is running at 11.1 m/s [N7°E]. Jennifer is running at 6.4 m/s [N53°E]. What is Jennifer's velocity relative to Patrick?

23. Jennifer is jogging at 2.3 m/s [S7°E]. Andrew is running at 7.3 m/s [S22°E]. What is Jennifer's velocity relative to Andrew?

24. Simran is jogging at 2.5 m/s [S58°W]. Srikanan is jogging at 2.6 m/s [E]. What is Srikanan's velocity relative to Simran?

25. Aditya is running at 11.3 m/s [N71°E]. Melanie is jogging at 2.2 m/s [N49°W]. What is Melanie's velocity relative to Aditya?

26. Regulan is running at 5.1 m/s [N9°W]. Stella is walking at 2.0 m/s [N73°E]. What is Stella's velocity relative to Regulan?

27. Aymen is jogging at 2.4 m/s [N48°E]. Nicole is walking at 2.1 m/s [N40°W]. What is Aymen's velocity relative to Nicole?

28. Angus is jogging at 2.5 m/s [N57°W]. Tiffany is jogging at 2.5 m/s [N22°W]. What is Angus's velocity relative to Tiffany?

29. Srikanan is jogging at 2.0 m/s [S10°W]. Samantha is walking at 1.6 m/s [N54°E]. What is Srikanan's velocity relative to Samantha?

30. Simran is walking at 2.1 m/s [N2°E]. Aymen is jogging at 3.0 m/s [S65°E]. What is Aymen's velocity relative to Simran?

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Practice makes perfect. Do as many of these problems as you need to in order master relative velocities. You have mastered this skill when you can do six problems in half an hour, without mistakes.

1. Stella is running at 7.4 m/s [S11°E]. Mallik is walking at 1.5 m/s [N48°E]. What is Stella's velocity relative to Mallik?

2. Iris is walking at 2.5 m/s [N12°W]. Yuki is running at 11.2 m/s [S67°E]. What is Iris's velocity relative to Yuki?

3. Timothy is walking at 2.5 m/s [S27°E]. Priya is walking at 1.5 m/s [N87°E]. What is Timothy's velocity relative to Priya?

4. Timothy is jogging at 2.4 m/s [N32°W]. Vincei is walking at 2.4 m/s [S]. What is Vincei's velocity relative to Timothy?

5. Allison is walking at 1.8 m/s [N3°W]. David is walking at 1.2 m/s [N44°E]. What is David's velocity relative to Allison?

6. Eric is walking at 2.4 m/s [N64°W]. Lily is jogging at 2.9 m/s [N50°W]. What is Eric's velocity relative to Lily?

7. Samantha is running at 4.4 m/s [S50°W]. Regulan is walking at 1.2 m/s [N60°W]. What is Regulan's velocity relative to Samantha?

8. Angus is running at 8.8 m/s [N59°E]. Iris is running at 3.9 m/s [N71°W]. What is Iris's velocity relative to Angus?

9. Simran is jogging at 2.9 m/s [N80°E]. Yuki is running at 4.3 m/s [N63°W]. What is Simran's velocity relative to Yuki?

10. Carmen is running at 6.4 m/s [N48°E]. E-Han is walking at 1.9 m/s [N46°W]. What is Carmen's velocity relative to E-Han?

11. Patrick is jogging at 2.5 m/s [N79°E]. Melanie is running at 3.3 m/s [N27°E]. What is Melanie's velocity relative to Patrick?

12. Aarun is running at 8.2 m/s [S58°W]. Iris is walking at 1.5 m/s [N5°W]. What is Aarun's velocity relative to Iris?

13. Melanie is running at 5.1 m/s [N79°E]. Yuki is jogging at 2.5 m/s [N88°W]. What is Melanie's velocity relative to Yuki?

14. Vincei is walking at 0.9 m/s [N50°E]. Regulan is walking at 1.1 m/s [N56°E]. What is Regulan's velocity relative to Vincei?

15. Bowen is running at 8.1 m/s [N66°W]. Isbah is running at 8.5 m/s [S71°E]. What is Bowen's velocity relative to Isbah?

16. Melanie is jogging at 2.6 m/s [N86°E]. Yuki is jogging at 2.9 m/s [N33°W]. What is Yuki's velocity relative to Melanie?

17. Tiffany is walking at 2.1 m/s [N68°E]. Bowen is walking at 1.1 m/s [S85°E]. What is Bowen's velocity relative to Tiffany?

18. Lily is running at 7.2 m/s [N24°W]. Yuki is running at 7.8 m/s [S11°W]. What is Yuki's velocity relative to Lily?

19. Lily is running at 7.3 m/s [N16°E]. Angus is jogging at 2.0 m/s [S81°E]. What is Lily's velocity relative to Angus?

20. Stella is running at 7.8 m/s [S45°E]. Timothy is walking at 2.2 m/s [N48°E]. What is Stella's velocity relative to Timothy?

21. Kari is running at 7.7 m/s [S39°E]. Douglas is running at 10.6 m/s [N52°W]. What is Kari's velocity relative to Douglas?

22. Simran is jogging at 2.1 m/s [N34°E]. Bowen is walking at 1.0 m/s [N29°W]. What is Simran's velocity relative to Bowen?

23. Stella is jogging at 2.1 m/s [S19°W]. Bowen is jogging at 2.3 m/s [N21°W]. What is Stella's velocity relative to Bowen?

24. Timothy is running at 7.1 m/s [N49°E]. Simran is jogging at 2.0 m/s [S36°E]. What is Timothy's velocity relative to Simran?

25. Timothy is walking at 1.3 m/s [N2°E]. Jennifer is walking at 1.9 m/s [N16°E]. What is Timothy's velocity relative to Jennifer?

26. Srikanan is walking at 0.9 m/s [N76°W]. Allison is running at 8.1 m/s [S39°W]. What is Allison's velocity relative to Srikanan?

27. Isbah is jogging at 2.1 m/s [N66°W]. Ohm is running at 5.0 m/s [N42°W]. What is Isbah's velocity relative to Ohm?

28. Andrew is jogging at 2.1 m/s [N75°W]. Isbah is walking at 2.2 m/s [S30°E]. What is Isbah's velocity relative to Andrew?

29. Grace is running at 11.6 m/s [S25°E]. Patrick is walking at 1.9 m/s [N51°E]. What is Grace's velocity relative to Patrick?

30. Jennifer is walking at 2.4 m/s [N69°E]. Davin is jogging at 2.3 m/s [N76°W]. What is Jennifer's velocity relative to Davin?