

Enriched Air Diver Course

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Knowledge Review, Section 1

Practical Application #1 and #2

Enriched Air Diver Course

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- Technical Diving

Knowledge Review, Section 2

Dive Planning Exercise

REVIEW

FINAL EXAM

Equivalent Air Depth (EAD) Sample Problems

1. Using EANx32, what is the EAD for 70 feet?
2. Using EANx36, what is the EAD for 76 feet?
3. Using EANx40, what is the EAD for 43 feet?

Using the RDP with EADs Sample Problems

1. What is the no decompression limit (NDL) for 70 feet when using EANx37?
2. What is the NDL for 74 feet when using EANx36?
3. What is the NDL for 103 feet when using EANx30?

Repetitive Dive Planning Sample Problems

1. Using EANx32, after a 20 minute dive to 70 feet and a one hour surface interval (SI), what are the adjusted NDL and residual nitrogen time (RNT) for a dive to 50 feet?
2. Using EANx36, after a 40 minute dive to 57 feet and a two hour surface interval (SI), what are the adjusted NDL and RNT for a dive to 50 feet?
3. Using EANx31, after a 37 minute dive to 75 feet and a one hour and 15 minute surface interval (SI), what are the adjusted NDL and RNT for a dive to 55 feet?

Repetitive Dive Planning with Different EANx Blends Sample Problems

1. After a dive to 66 feet for 32 minutes using EANx36, and a one hour SI, what are the adjusted NDL and RNT for a dive to 60 feet using EANx32?

2. After a dive to 68 feet for 38 minutes using EANx33, and a one hour and 20 minute SI, what are the adjusted NDL and RNT for a dive to 56 feet using EANx36?

3. After a dive to 75 feet for 28 minutes using EANx30, and a one hour and 40 minute SI, what are the adjusted NDL and RNT for a dive to 65 feet using EANx32?

Using the Enriched Air RDPs

1. Using the Enriched Air RDP for EANx32, after a 30 minute dive to 65 feet and a one hour SI, what is your adjusted no decompression time for a dive to 58 feet?

2. Using the Enriched Air RDP for EANx36, after a dive to 90 feet for 35 minutes and a one hour and 45 minute SI, what are your adjusted NDL and RNT for a dive to 69 feet?

3. Using the Enriched Air RDP for EANx36 and the air RDP table, if your first dive is made using EANx36 to 90 feet for 38 minutes, after a 90 minute SI, what are your NDL and RNT for a dive to 70 feet using air?
4. Using the Enriched Air RDP for EANx36 and the Enriched Air RDP for EANx32, if your first dive is made using EANx36 to 87 feet for 26 minutes, after a 90 minute SI, what are your NDL and RNT for a dive to 70 feet using EANx32?

Maximum and Contingency Depth Limits and ppO₂ Sample Problems

1. What is the maximum depth limit for EANx35?
2. What is the contingency depth limit for EANx32?
3. What are the maximum and contingency depth limits for EANx40?
4. What are the maximum and contingency depth limits for EANx36?
5. What is the oxygen partial pressure at 50 feet with EANx38?
6. What is the oxygen partial pressure at 57 feet with EANx36?

Calculating Oxygen Exposures Sample Problems

1. How much oxygen exposure results from a dive with 1.4 pp for 30 minutes?
2. How much oxygen exposure results from a dive with 1.12 pp for 45 minutes?

3. A diver makes a dive with 1.28 pp for 34 minutes, then, following a one hour and 30 minute SI, makes a dive with a 0.80 pp for 42 minutes. How much of the allowable 24 hour exposure has the diver used?

4. If a diver makes a 1.33 pp for 80 minutes, how many allowable minutes of oxygen exposure would the diver have with 1.2 pp if the diver used 100 percent of the allowable exposure?

5. A diver makes a dive to 70 feet using EANx32 and stays for the allowed no decompression time. What are the oxygen exposure percent and RDP pressure group?

6. A diver has just finished 3 dives. The last dive yielded pressure group T and oxygen exposure totals of 70%. After a one hour and 20 minutes SI, what is the maximum allowable dive time for a dive to 60 feet using EANx38? [Note—you have 2 values to figure out here before giving the answer!]

7. A diver plans 2 dives. The first dive is planned to 87 feet using EANx36 for the no decompression limit, followed by a one hour SI. What is the maximum allowable dive time for a repetitive dive to 48 feet using EANx40?

8. A diver finishes his first dive of the day in pressure group R, and having used 35% allowable oxygen exposure. If the next dive will be made to 60 feet using EANx36 after a one hour and 10 minute SI:
 - a. What is the adjusted NDL?

- b. How much allowable oxygen exposure time is there?
- c. If the diver has 25 minutes of bottom time, what will the pressure group and total oxygen exposure be after the dive?

EAD Formula Sample Problems

1. What is the exact EAD for 68 feet using EANx39?
2. What is the exact EAD for 56 feet using EANx32?
3. What is the exact EAD for 92 feet using EANx28?

Oxygen Partial Pressure Formula Sample Problems

1. What is the exact oxygen pp for 76 feet using EANx37?
2. What is the exact oxygen pp for 49 feet using EANx30?
3. What is the exact oxygen pp for 84 feet using EANx29?

Maximum and Contingency Depth Formulas Sample Problems

1. What are the exact maximum and contingency depth limits for EANx37?
2. What are the exact maximum and contingency depth limits for EANx32?
3. What are the exact maximum and contingency depth limits for EANx28?

Dive Planning Exercise (nitrox tank percentages based on in-store analyses)

You are going to do 2 dives at Cathedral Rocks using the cylinders that **you just analyzed**. The first dive is going to be to 78 feet and the second dive is going to be to 69 feet. Determine the dive plans to maximize your bottom time on both dives but without exceeding the adjusted NDL and oxygen exposure limits and using the minimum recommended surface interval.